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DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII

Extreme Speeding Integration Report

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EXECUTIVE HIGHLIGHTS

Report Integration

- The telephone survey findings were supported with the following phases of the social marketing study: literature review, expert interviews, and focus groups.

Extreme Speeding

- Young males are the most likely to regularly exceed the speed limit.
- Of all fatal crashes in the United States, young males under the age of 25 are most likely to have speed as the cause.
- Females under the age of 25 exhibit the same tendencies to speed.

Acceptance of Society

- The majority of the drivers in Hawaii exceed the speed limit by one to ten miles per hour.
- There are extreme speeders among all age groups, but young drivers under the age of 25 were most likely to exceed the speed limit by twenty miles per hour.
- About half of Hawaii's drivers believe that one to five miles per hour over the speed limit is acceptable.
- Speeding is accepted as a social norm in Hawaii.
- Half of the drivers set their speed with others on the road regardless of the speed limit.
- The majority of the respondents underestimate the actual number of speeding and/or racing fatalities in Hawaii.

Overview of Drivers

- The majority of the respondents drive cars rather than trucks, SUVS, minivans, and other vehicle types.
- Honda ownership was high among drivers between 18 and 25.
- The young drivers tended to own newer vehicles.
- About one in five drivers between the ages of 18 and 25 have a vehicle modification.

Speeding Situations

- The leading influence to speed among the choices listed was driving alone.
- Previous research demonstrated that low self-esteem and boosts in self image influenced young drivers to speed.

Perception of Teenage Drivers

- More than half of the drivers in all of the age groups agreed that teenagers drive too fast.
- A large portion of drivers also believed that teenagers caused the most accidents in Hawaii.
- Focus groups supported an idea that some of the teenage drivers who admitted to extreme speeding dissociated themselves from other teenagers who raced or had modified vehicles.

Recognizing the Dangers with Extreme Speeding

- The majority of the respondents agreed that driving more than 20 miles per hour over the speed limit puts drivers at risk of a serious accident.

Street Racing

- About a third of the young drivers have seen their friends race on the streets, but a lower percentage admitted to being in a street race.

Feelings Elicited by Extreme Speeding

- Mainly the young respondents said that driving fast gave them a rush.
- Among the top feelings elicited by speeding that were given in open responses were "scared and afraid," "adrenaline rush," and "nervous and tense."

Extreme Speeding Prevention

- License revocation and suspension were the most favored speeding deterrents.
- The other deterrents that were considered likely to prevent extreme speeding were in the following order: Doubling insurance rates of extreme speeding offenders, a racetrack open to the public on weekends, and doubling annual registration fees on modified vehicles.
- The focus groups also supported higher fines for speeding tickets as well as driver's education to help limit the number of extreme speeders.

Enforcement Cameras

- An equal number of respondents believed enforcement cameras were effective compared to those who said it was ineffective.
- Experts who were interviewed supported the enforcement cameras but said the previous program was implemented incorrectly because it did not target extreme speeders.

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Extreme Speeding Study

The Hawaii Department of Transportation contracted SMS to organize a social marketing campaign to decrease extreme speeding among young male drivers. The objectives in the initial stages of the project were to identify attitudes and behaviors toward speeding with comparisons across age groups. The ultimate goal of the study will be to develop influential messages and approaches that would deter extreme speeding and offer alternatives to the dangerous behavior.

The project was initiated as a result of an overrepresentation of young male speeders in Hawaii. The study was implemented through a series of stages, which started with a literature review and continued with expert interviews, focus groups, and a telephone survey. An overview of each stage is as follows:

- **Literature Review:** Previous research studies and historic data were organized to establish a background on general speeding behavior.
- **Expert Interviews:** Safety experts and public officials provided their in-depth knowledge on issues concerning extreme speeding.
- **Focus Groups:** Two groups of male drivers between the ages of 18 and 25 who have modified cars, a session with male and female speeders, and a group with parents of young drivers.
- **Telephone Survey:** Two hundred participants between 18 and 25 as well as two hundred over the age of 25 were randomly sampled throughout Hawaii in order to assess their behaviors and attitudes toward speeding.

Findings from each of the four phases have been integrated into this report. Subsequently, a social marketing plan will be written and tested through an e-mail panel with experts and the general public.

Telephone Survey Methodology and Sampling

The survey was conducted during October and November of 2003 with four hundred random households in the State of Hawaii. The sample for the survey was selected from a stratified frame, which was random within strata. The procedure uses disproportionate stratification for each island, and proportionate stratification for selecting telephone number stems within each island. The sample size provided a margin of error of +/- 5% on responses.

In addition, the survey was fielded using a Computer Assisted Telephone Interviewing system. This surveying method allows an interviewer to directly enter responses into a computer file with the Survey System program. The questionnaire patterns were automatically programmed, and the interviewer was able to view the questions and answers of the survey through a computer screen. Responses collected in the data file were aggregated and analyzed through SPSS v10.

Overview of the Social Marketing Process

Social marketing is the planning and implementation of programs designed to bring about social change using concepts from commercial marketing. This process will ultimately reshape behavior over time with continuous reinforcement and a multidirectional approach from various points of influence.

Important concepts that construct the foundation for the social marketing process are as follows:

- The objective of marketing is to influence action
- Action is undertaken whenever target audiences believe that the benefits they receive will be greater than the costs they incur (costs are not restricted to financial costs)
- Programs to influence action will be more effective if they are based on an understanding of the target audience's own perceptions of the proposed exchange
- Target audiences are seldom uniform in their perceptions and/or likely responses to marketing efforts and so should be partitioned into segments
- Marketing efforts must incorporate all of the "4 Ps" of marketing:
    - Create an enticing **product** (i.e., the package of benefits associated with the desired action)
    - Minimize the **price** the target audience believes it must pay or compromise in the exchange
    - Make the exchange and its opportunities available in **places** that reach the audience and fit its lifestyles
    - **Promote** the exchange opportunity with creativity and through channels and tactics that maximize desired responses
- Recommended behaviors always have competition, which must be understood and addressed. In this case, the competition would be current behaviors that need to be reshaped. The benefits of current and recommended behaviors must be weighed to assess the influence on the audience's actions.
- The marketplace is constantly changing, so program effects must be regularly monitored. In addition, management must be prepared to rapidly alter strategies and tactics through time.

Speeding

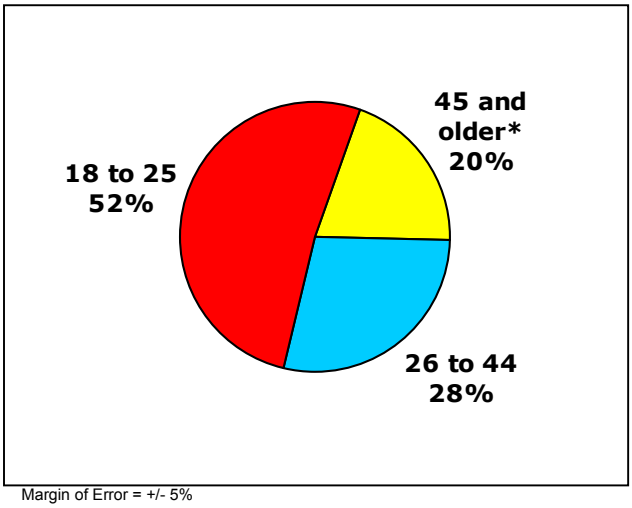
The nation's Basic Speed Rule states that, "A person shall not drive a vehicle at a speed greater than is reasonable and prudent and having regard to the actual and potential hazards and conditions then existing." Speeding, as defined by the Hawaii traffic laws, is exceeding posted limits by at least 10 mph, and excessive speeding is driving more than 15 mph over the limit. In addition, an excess of 15 mph over any posted speed limit is considered to be reckless driving under the State's laws. Within the report, extreme speeding will be classified as exceeding the speed limit by more than 20 miles per hour.

State statistics show that 25 percent of the 140 traffic fatalities during 2001 were speed related. Of all the drivers involved in fatal crashes in the United States, young males under the age of 25 are most likely to have speed as the cause. According to a 1999 document provided by the National Highway Traffic Safety Administration (NHTSA), males were more likely than females to enjoy the feeling of speeding in a vehicle (46% vs. 32%) and worry less about the dangers of a collision (41% vs. 32%). Besides young males, researchers in Australia discovered that drivers who would most likely exceed the speed limit fell into one of the following nonexclusive categories: less than 25 years of age, drove alone, owned newer vehicles, traveled for business purposes, and had high annual mileage (Fildes et al. 1991).

Age Segments

The drivers that participated in the speeding study were separated into three age groups that were not gender-specific. This was done to assess the difference among age groups and identify possible changes in attitudes and behavior through maturity. The survey consisted of 202 18 to 25 year olds, which corresponds to a +/- 6.9% margin of error in this age's responses. The second largest group represented in the survey consisted of 110 26 to 44 year olds, which yields a +/- 9.5% margin of error. The oldest age group is 45 years and older, which has a sample size of 77 and margin of error of +/- 10.8%. Responses from each of the age groups will be presented throughout the report.

Figure 1. Respondent Age Groups

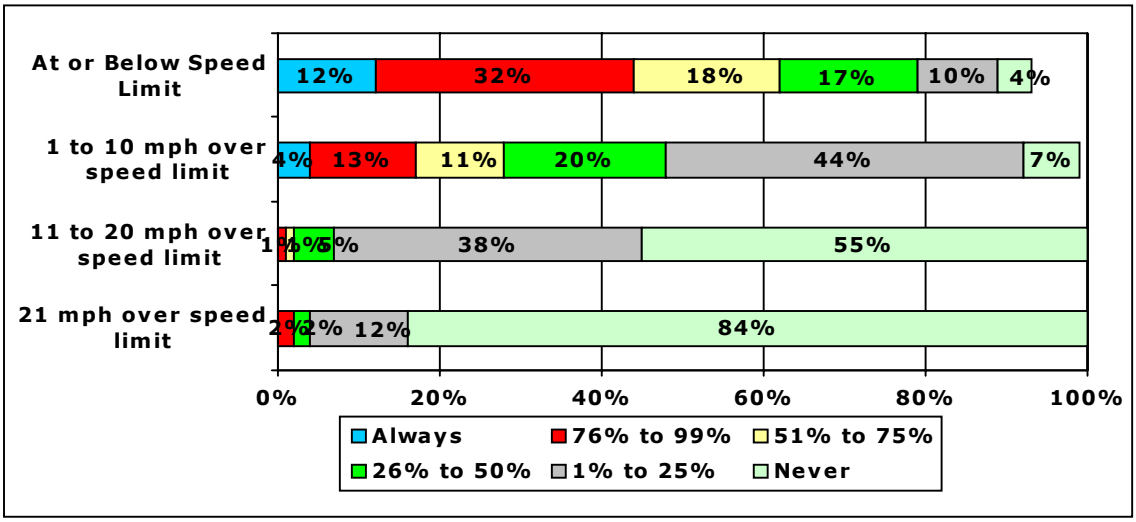


Margin of Error = +/- 5%

Acceptance of Society

Figure 2 below illustrates the speeding behavior among the general population in Hawaii. It appears that speeding has become the norm in Hawaii based on the finding that only 12% of the participants always drive at or below the speed limit. Furthermore, 92% reported that they drive 1 to 10 miles per hour over the speed limit. As far as extreme speeding is concerned, 16% of the general population exceeds the speed limits by more than 21 miles per hour.

Figure 2. Speeding Behavior Among General Population in Hawaii



Margin of Error = +/- 4.7%
Percentages may not equate to 100% due to the omission of "Don't Know" and "Refused" responses

Figure 3. Extreme Speeding Percentages and Projected Number in Hawaii

Percentage	18 to 25		26 to 44		45 and older	
	M	F	M	F	M	F
Never	72%	83%	86%	86%	83%	96%
Sometimes to Always	28%	17%	14%	14%	17%	4%

Projected	18 to 25		26 to 44		45 and older	
	M	F	M	F	M	F
Never	39,288	39,115	145,027	134,200	171,753	174,106
Sometimes to Always	15,279	8,011	23,609	21,847	35,178	7,254

*Source: Hawaii DOT Public Affairs- Driver's Licenses by Age Group

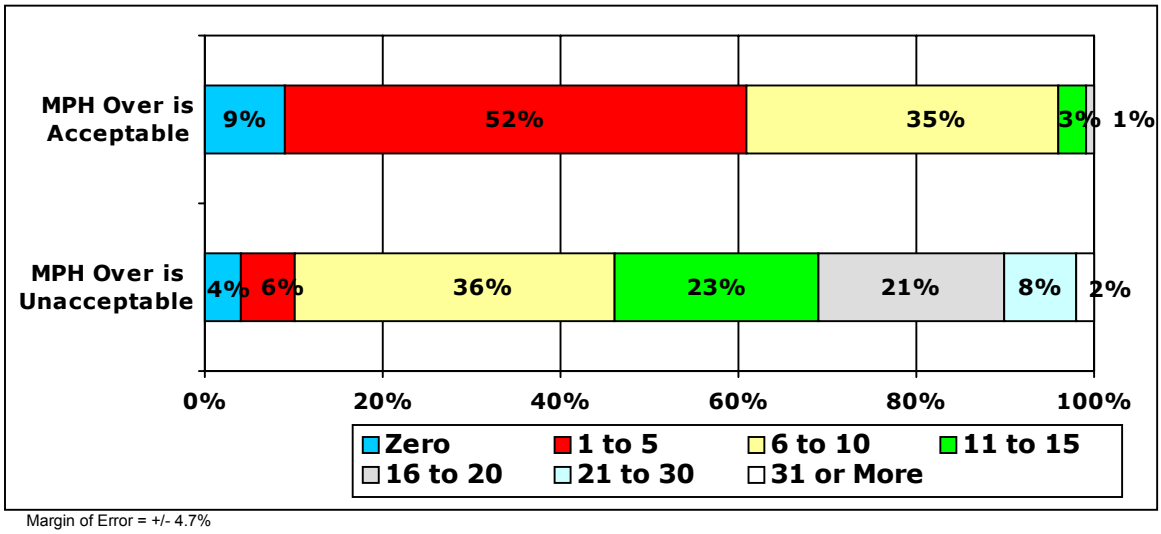
Figure 3 takes a closer look at extreme speeders. The three age groups were further broken down by gender in order to determine differences in extreme speeding behavior. Consistent with the literature reviewed, males (28%) between the ages of 18 to 25 tended to drive above 21 miles per hour more often compared to females (17%) of the same age range. In addition, the number of extreme speeders was also projected to Hawaii's 2000 Census in order to estimate the actual size of the segments. Approximately 15,279 males and 8,011 females from the 18 to

25 age group drive at extreme speeds on Hawaii's roadways. Moreover, the percentage of male extreme speeders decreases within the older age groups but remains in the 14% to 17% range. The percentage of female extreme speeders takes more of a decline from 14% for the 26 to 44 year olds down to 4% in the 45 and older age group.

The findings presented in Figure 3 are consistent with other speeding research done in the past. Contrary to many studies that have pointed out men solely as the speeders, Wasielewski (1984) found that speeding was not gender specific. A more recent study revealed that the degree of risk taking among different age groups was similar for males and females, and it was suggested that females were less likely to admit to risk taking while driving (Boyce and Geller 2002). In addition, Parker and Standling's (1995) research showed that female drivers under the age of 20 reported similar tendencies to speed as male drivers within the same age group. Moreover, researchers in Australia discovered that drivers who would most likely exceed the speed limit fell into one of the following nonexclusive categories: less than 25 years of age, drove alone, owned newer vehicles, traveled for business purposes, and had high annual mileage (Fildes et al. 1991).

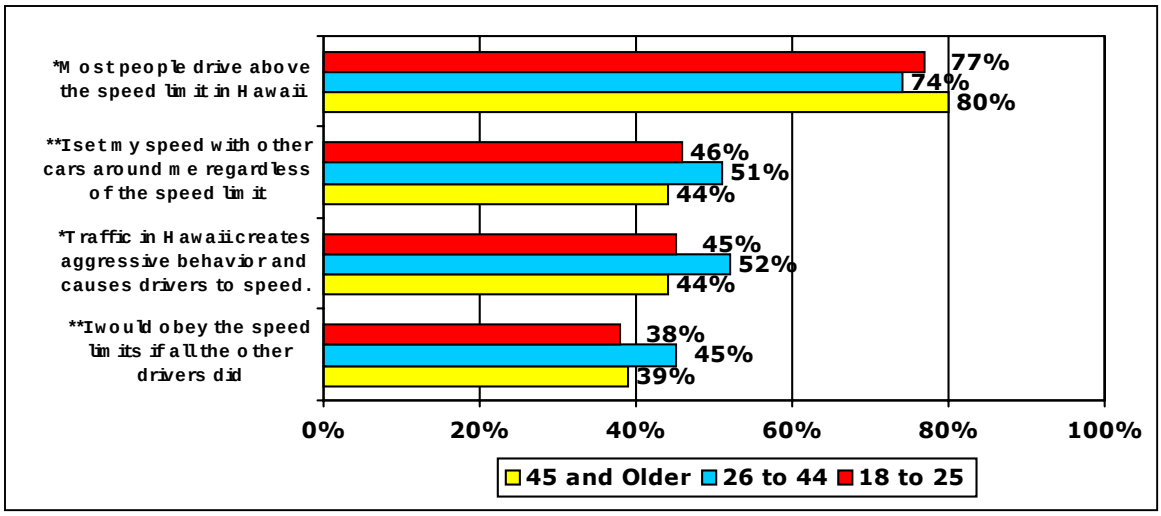
Figure 4 further demonstrates the acceptability of speeding levels among Hawaii's general population. Slightly more than half (52%) believes that 1 to 5 miles per hour over the speed limit is acceptable. An additional 35% feel that there is no problem driving 6 to 10 miles per hour over. Only 10% of the general population believes driving at most 5 miles per hour over the speed limit is unacceptable.

Figure 4. Speeding Acceptability



Margin of Error = +/- 4.7%

Figure 5. Society's Attitudes Toward Speeding



*Margin of Error = +/- 7.8%
** Margin of Error = +/- 5%
Percentages represent "Strongly Agree" and "Somewhat Agree" responses combined

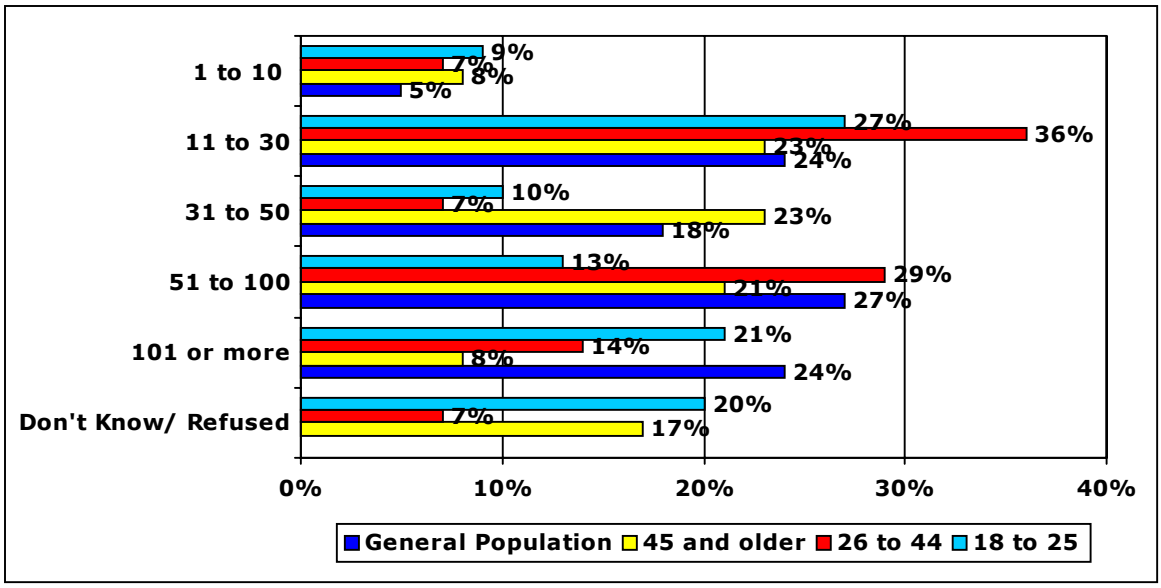
In Figure 5, four statements were presented in the telephone survey that related to attitudes and behaviors toward speeding. Based on perceptions, about three quarters of each of the age groups agreed that most people drive above the speed limit in Hawaii. This response further confirms that speeding in Hawaii is widely accepted as a norm. In addition, about half of the drivers set their speed with other cars regardless of the speed limit. Basically, these respondents drive with the flow of traffic. Other findings show that around half of the respondents agreed that traffic in Hawaii creates aggressive behavior and causes drivers to speed. Similar to those that drive with the flow of traffic, about 38% to 45% of the drivers said they would obey the speed limits if all other drivers drove the speed limit.

The majority of the drivers in Hawaii break the speed limit even though they are aware that it is against the law. Many drivers believe that exceeding the speed limit by as much as 5 to 10 miles over is acceptable. In the DETR (2000) study, it was determined that most drivers did not view breaking the speed limit as a criminal act. Another survey by Brook (1987) had drivers rank eight crimes, and "driving at 50 mph in a 30 mph limit" was rated the least serious as shown in the table below:

Rank order	Crime Listed
1	Injuring a pedestrian while driving carelessly
2	Driving after drinking too much
3	Burgling from a house while the owners are away
4	Driving after disqualification by a court
5	Vandalizing a telephone box
6	Driving through a red traffic light
7	Shoplifting from a supermarket
8	**Driving at 50 mph in a 30 mph limit**

Source: Brook 1987

Figure 6. Estimation of Speeding and/or Racing Fatalities in Hawaii



Margin of Error = +/- 8.6%

Figure 6 gives an idea about the public's awareness of the number of speeding and/or racing fatalities each year in Hawaii. Of the 18 to 25 year olds, the two highest percentages are in the ranges of 11 to 30 (27%) and estimations of 101 or more (21%). The majority (36%) of the 26 to 44 year olds estimated between 11 and 30 fatalities. Among the drivers over the age of 45, the two highest estimations are between 11 to 30 (23%) and 31 to 50 (23%) fatalities per year. In recent years, the number of known speeding-related fatalities was roughly over 35 in Hawaii. Based on the public's awareness, most of the estimations fall just below or high above the actual number of fatalities.

Transition to Change Behaviors: Transtheoretical Model[1]

People go through a process of changing their behavior. For each person, this change varies in the amount of time and transformation process. Below is an overview of each of the five stages in the Transtheoretical Model that can be applied to behavioral modifications.

- **Precontemplative**: Individuals in this stage have no intention of changing their behavior in the near future. They are also unaware of the risk they are putting themselves at with their current behavior. In addition, they deny the consequences of their risky behavior.

- **Contemplative**: People are aware that a problem exists and are seriously thinking about overcoming it. The downside is that they have not yet made a commitment to changing their behavior.

- **Preparation/ Decision-Making**: People intend to take action in the foreseeable future and may have attempted to change their behavior in the past.

- **Action**: People begin modifying their behavior, experiences, or environment to overcome their bad behavior. During this stage, their behavior change has been relatively recent.

- **Maintenance**: People are working to prevent relapse, and maintain behavior changes over an extended time period.

Based on the general public's speeding behavior and societal beliefs toward speeding, it appears Hawaii is in the Preparation Stage in the Model. Their estimations of the speeding-related fatalities shows that they are aware of the problem but continue to exceed the speed limit. Furthermore, there is a minority group who still drives at an extreme speed. In light of the highly publicized speeding and racing crashes in Hawaii, the target group is most likely aware of the problem, but more effort needs to be made to prevent the dangerous behavior. Transitions toward the positive reshaping of behaviors in the Transtheoretical Model may be difficult when aimed at the population as a whole due to the excessive amount of speeders. On the other hand, focusing efforts on extreme speeders may prove to be more successful when reshaping behaviors considering the relative size of the at-risk group as well as the extent of the consequences of driving at higher speeds.

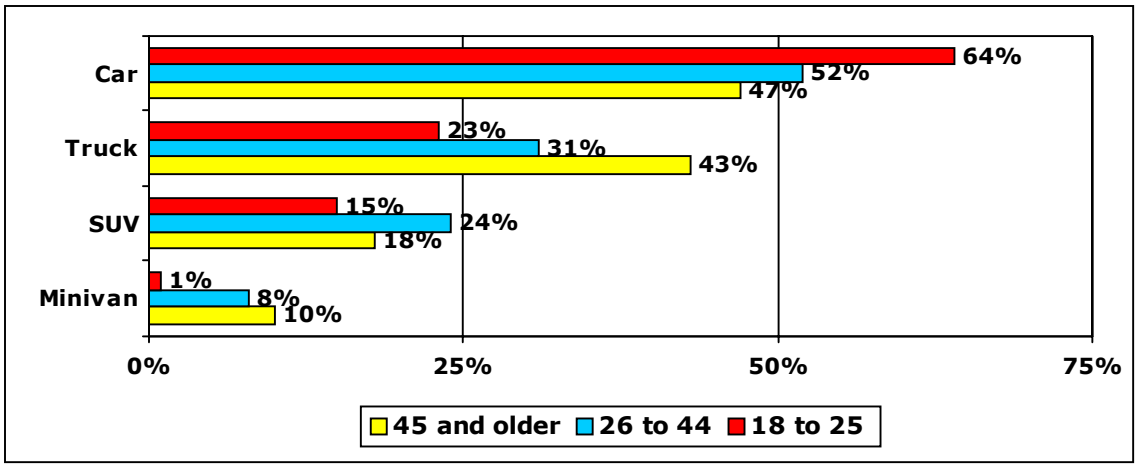
[1] NHTSA (2000)

KEY FINDINGS

Overview of Drivers

The series of graphs presented below will provide a basic overview of the types of vehicles driven by the respondents in the speeding survey. In Figure 7, the majority in each of the three age groups drive cars with the exception of those 45 and older, who are just as likely to drive trucks.

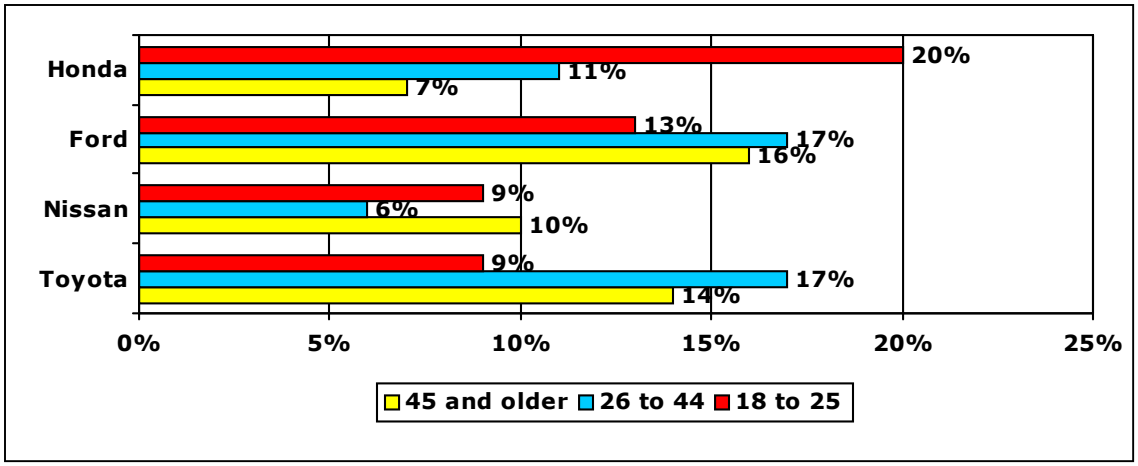
Figure 7. Vehicle Type



Margin of Error = +/- 5%
Percentages exceed 100% due to multiple response

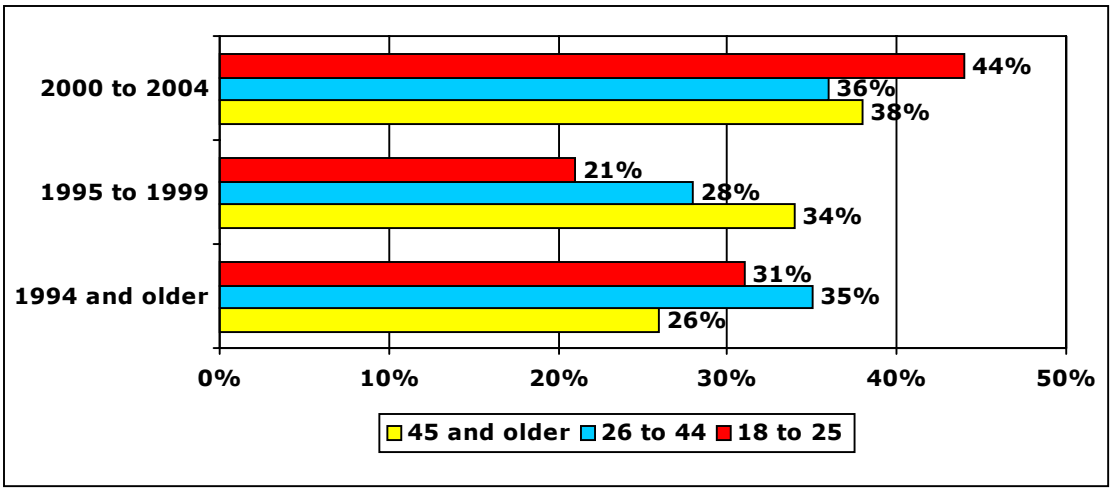
Below, the top four car makes driven by the respondents of the survey are presented. It appears that the Honda is the car of choice among one in five (20%) drivers between the ages of 18 and 25. The Ford and Toyota could be considered the two most owned vehicle types among the 26 to 44 year olds and those older than 45.

Figure 8. Vehicle Make



Margin of Error = +/- 5%

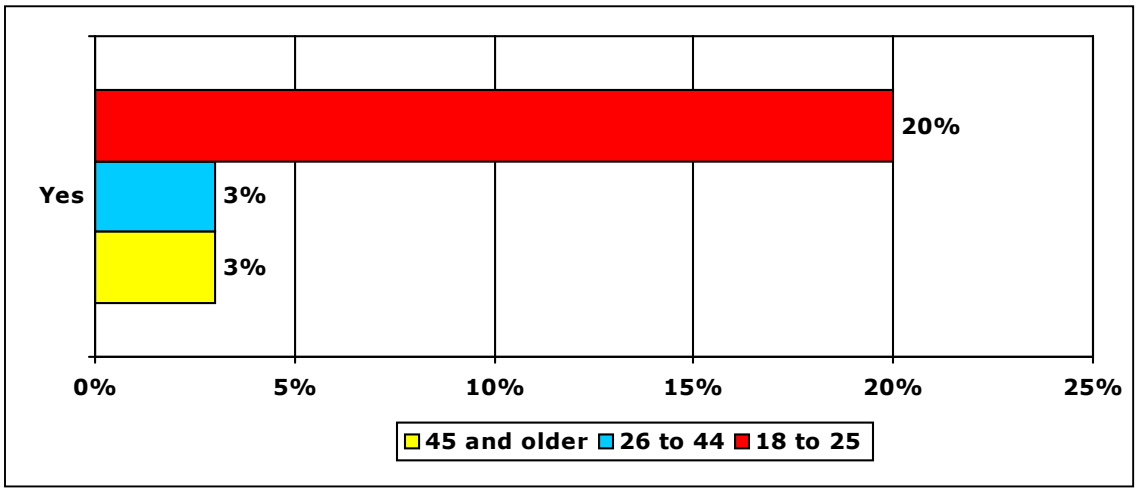
Figure 9. Vehicle Year



Margin of Error = +/- 5%

In Figure 9, younger drivers between 18 and 25 tend to own newer vehicles. On the other hand, the ages of the vehicles varies among the older generations.

Figure 10. Vehicle Modifications



Margin of Error = +/- 5%

According to Figure 10, one in five (20%) of the 18 to 25 have some sort of vehicle modifications. Based on responses in the focus groups, common modifications included exhaust, intake, and suspension. The modifications enhance the performance of their vehicles, which in turn makes the drivers more likely to drive at higher speeds to test the ability of the vehicle. In addition, a few focus groups determined that some of the parents were financing their child's vehicles, as stated in the following comments:

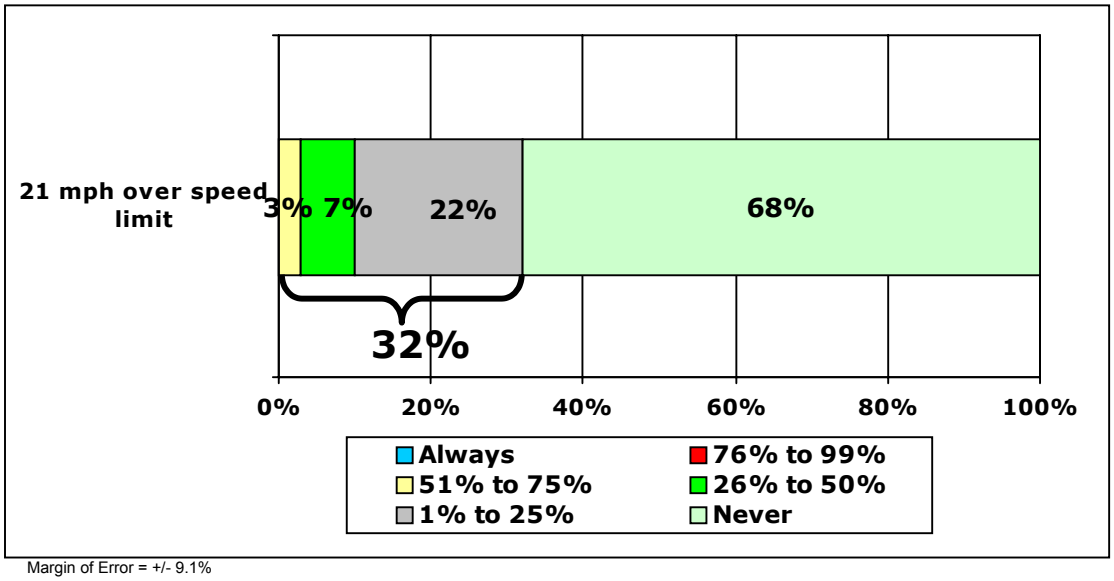
> "All of his buddies, who get these speeding tickets and accidents, have their parents pay for everything. Not me."

> "One of his parents is buying a turbo charger, so the parents are actually encouraging these kids."

"His parents are divorced. Both of them were fighting for the kid's affection. They were pretty lenient. They bought his car. They financed his car. 'Whatever you want. Oh, how much money do you need?' It's kind of like that. I don't think you're doing any justice to your children by doing that."

Extreme Speeding

Figure 11. Extreme Speeding Among 18 to 25 Year Olds



Margin of Error = +/- 9.1%

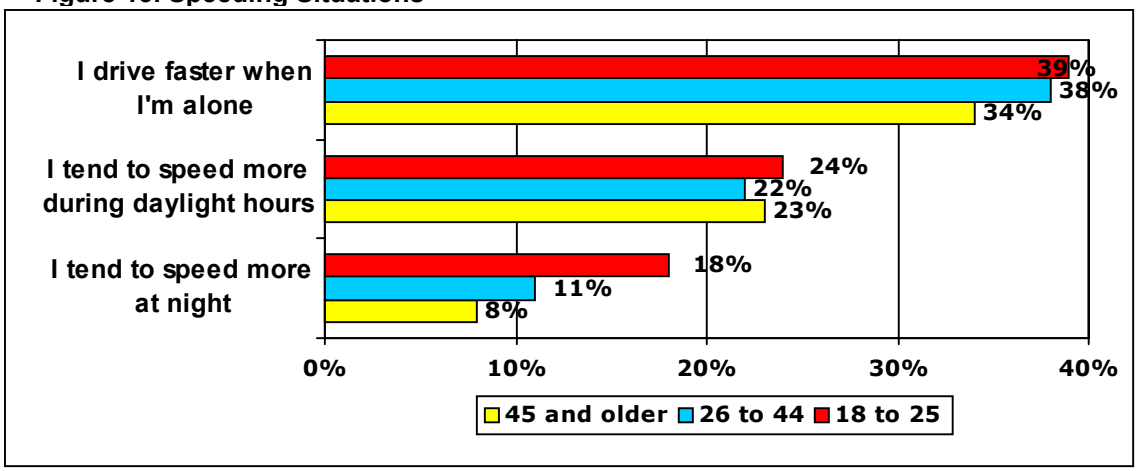
Figure 12. Projected Number of Extreme Speeders Between 18 and 25

	18 to 25 Year olds
Licensed Drivers*	101,693
Extreme Speeders	32,059

*Source: Hawaii DOT Public Affairs- Driver's Licenses by Age Group

Earlier in the report, speeding findings were presented based on the sample from a general population survey among all age groups. The same question regarding extreme speeding was asked in another survey focusing on the at risk group. With a higher sample size of 18 to 25 year olds compared to the general population survey, the percentage of extreme speeders was higher at 32%. In addition, the projected number of extreme speeders between the ages of 18 and 25 was estimated at 32,059, which was about 10,000 higher than what was projected in the general population survey. The projected numbers differ as a result of the variation between sample sizes.

Figure 13. Speeding Situations



Margin of Error = +/- 5%

Percentages represent "Strongly Agree" and "Somewhat Agree" responses combined

Figure 13 presents a few situations in which drivers tend to speed. More than a third of the drivers across all age groups agreed that they drive faster when they are alone. About a quarter of the drivers agreed that they tend to speed more during daylight hours. The biggest difference in speeding tendencies occurs at night. Almost one in five (18%) 18 to 25 year olds tend to speed at night compared to 11% of the 26 to 44 year olds and 8% of the drivers over the age of 45.

In other speeding research it was determined that drivers alone in a vehicle were more likely to exceed the speed limit, while those with two occupants were less likely to exceed the speed limit (Fildes *et al* 1991). Another study covered a set of different reasons that caused drivers to speed. Silcock *et al* (2000) explored driver's reasoning toward speeding and listed the following eight most prevalent reasons:

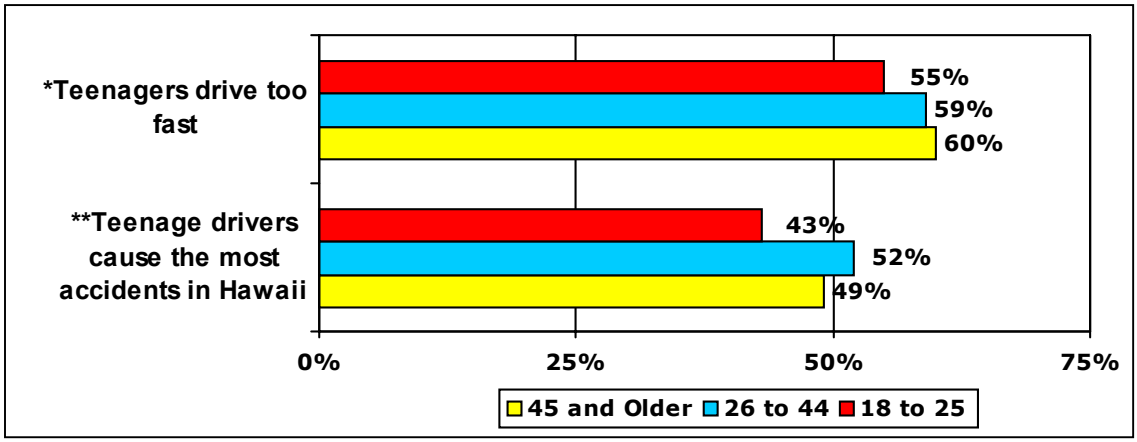
- Unintentional
- In a hurry (e.g. to collect a child at school)
- Being forced to speed (by a tailgater)
- The speed limit was wrongly set for the location
- They felt that their car could stop fast enough to avoid danger
- The same speed limit does not apply at all times (an empty road or late at night)
- A speed limit does not apply to above average drivers
- Speeding is acceptable if it is not habitually broken

Other factors related to speeding as identified by Silcock *et al* (2000) were self-image, vehicle power and comfort, culture, passengers, enforcement, and road type.

Continuing with the idea of self-image, Basch et al. (1987) studied young drivers' attitudes and concluded, "Although as adults we may view risky driving behavior by young drivers as irrational, the results of this study produce convincing evidence that risky driving behavior can, for young people, provide valuable social rewards." This is supported with the idea that the highest risk young drivers may also have low self-esteem, low self control, low social responsibility, and irrational beliefs (Rolls and Ingham, 1992). Basically, some young drivers speed as a way to fill the voids in their social lives and low self-esteem. That may provide them

with sense of self-worth or superiority when they exceed the speed limits of the normal flow of traffic.

Figure 14. Perception of Teenage Drivers

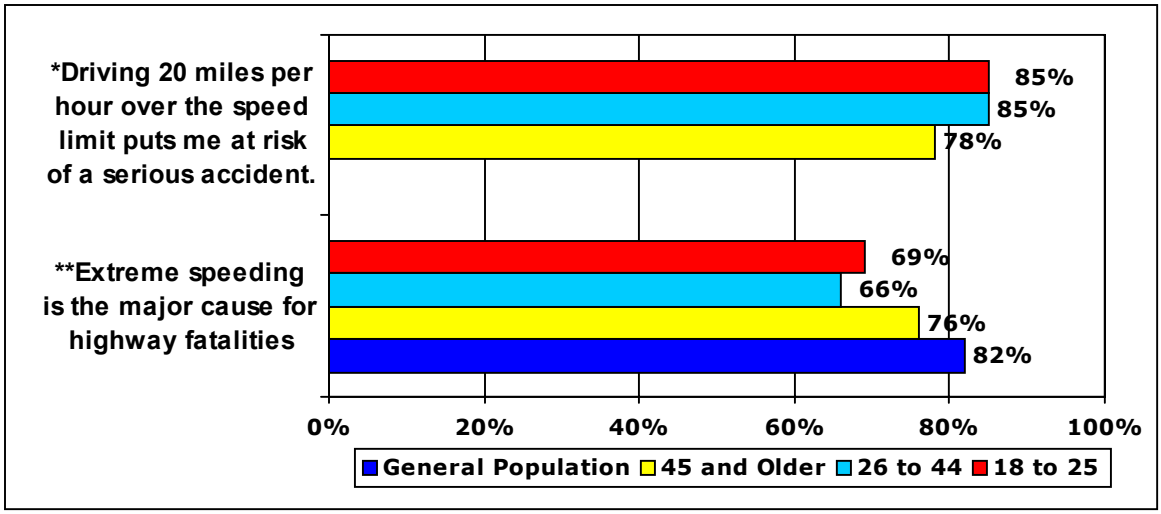


*Margin of Error = +/- 7.9%
** Margin of Error= +/- 5%
Percentages represent "Strongly Agree" and "Somewhat Agree" responses combined

Figure 14 covers the perceptions of teenage drivers. In both statements presented to the drivers, the younger age groups were less likely to agree. For instance, when asked if teenagers drive too fast, 55% of the 18 to 25 year olds agreed compared with 59% of those 26 to 44 and 60% over the age of 45. Similarly, 43% of the respondents between 18 and 25 agreed that teenage drivers cause the most accidents in Hawaii versus about 50% of the older respondents who agreed to the statement. One focus group participant summed up their generalization of extreme speeders with the statement, "I think they all fit into the same category. They're all young kids trying to see how fast their cars can go." A few other focus group participants had comments of their own. Although they were between 18 and 25, some of the participants dissociated themselves from the problem group with the following standpoints:

> "I don't know if you guys remember, but when they had that accident in Kaimuki that kid hit the side barrier, and he went off the freeway. He was racing with somebody. That kind of speeding is different from the type of speeding I do."
>
> "There's a difference between conscious and unconscious speeding. Accidents you've seen lately are unconsciously speeding. They're just in the zone. They're not thinking."
>
> "They soup it up and now they want to show it off. 'My car is better than yours.' When I go fast, it's my business. I'm not out there to show that I can drive fast. I just personally want to drive fast."

Figure 15. Recognition of Danger with Extreme Speeding



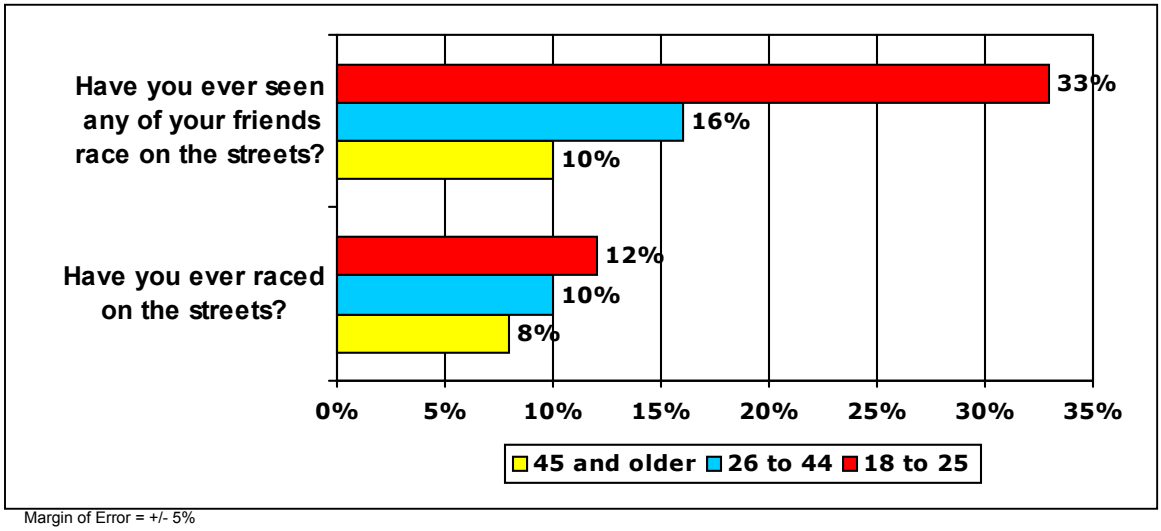
*Margin of Error = +/- 5%
**Margin of Error= +/- 7.9%
Percentages represent "Strongly Agree" and "Somewhat Agree" responses combined

Figure 15 demonstrates that the drivers recognize the potential dangers of driving at extreme speeds. The majority of the 18 to 25 year olds (85%) agreed that driving 20 miles per hour over the speed limit puts them at risk of a serious accident. Likewise, 85% of the 26 to 44 year olds and 78% of the drivers over the age of 45 agreed that extreme speed puts drivers at risk. About three quarters of the respondents agreed that extreme speeding was the major cause of highway fatalities. Despite the majority's understanding of the dangers, a couple of the focus group participants seemed unaffected by the risk of extreme speeding based on their comments:

"I drive reckless, I got into two wrecks already."

"After the accidents, I didn't slow down."

Figure 16. Extreme Speeding and Racing



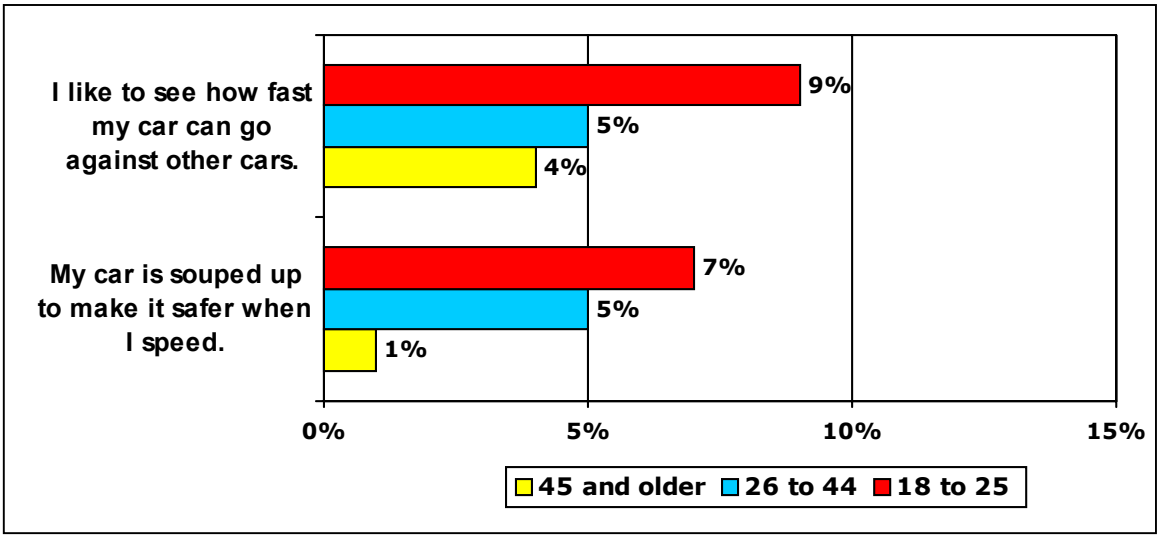
Margin of Error = +/- 5%

A third (33%) of the 18 to 25 year olds have seen their friends race on the street while 12% of the same age group have raced on the streets themselves. The percentage who have

witnessed friends racing on the street drops to 16% among the 26 to 44 year olds and down to 10% with those over the age of 45. About one in ten (8% to 10%) of the order generations have once raced on the streets. In addition, some of the focus group participants explained their feelings toward street racing in the following comments:

> "I like street racing. It's more fun."
>
> "On the street, you're breaking the law and if you get away with it, you kind of feel good about it."

Figure 17. Racing and Car Modifications



Margin of Error = +/- 5%
Percentages represent "Strongly Agree" and "Somewhat Agree" responses combined

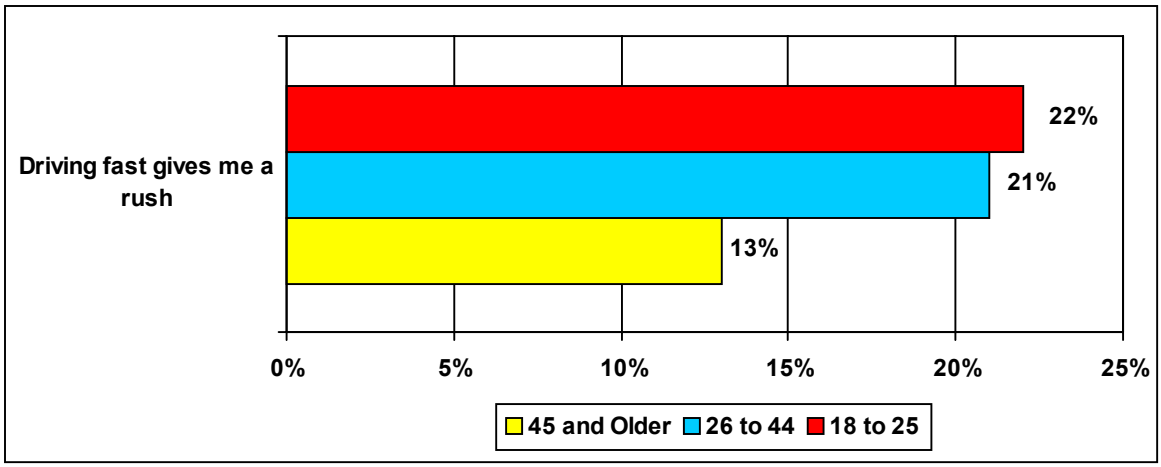
Figure 17 focuses on the minority of extreme speeders and racers by asking about car performance and modifications. In a question that implies racing, 9% of the 18 to 25 year olds agreed that they liked to see how fast their car could go against other cars. Some of the focus group participants made the following comments about racing:

> "I race anybody when I'm running late."
>
> "I don't know how many times I've put timeframes on how fast it takes me to get from here to here."

During the expert interviews, several respondents believed that young people drive fast as a way to show off their car and driving skills. Experts also noted that the street racers modify their cars to enhance performance, which influences them to break speed limits at extreme levels. In Figure 17, 7% of the drivers between 18 and 25 agreed that their car is souped up to make it safer when speeding. A couple of comments from the focus group support their safety position:

> "Yeah, the car is built to go faster."
>
> "You're prepping the car to actually handle it. You can make a lower center of gravity."

Figure 18a. Feelings Elicited by Extreme Speeding

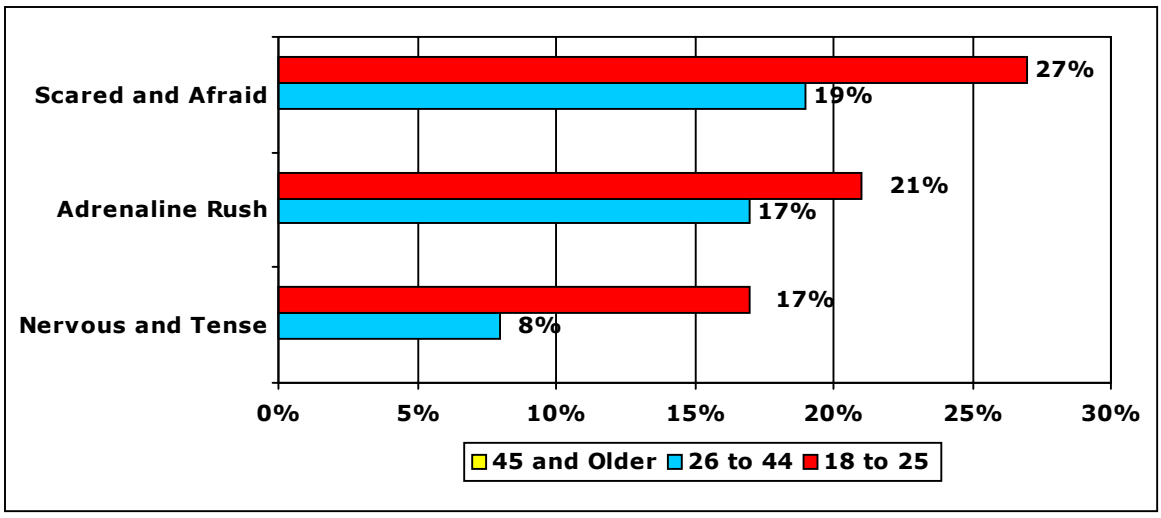


Margin of Error = +/- 5%

Percentages represent "Strongly Agree" and "Somewhat Agree" responses combined

In Figure 18a, about one in five (22%) 18 to 25 year olds agreed that driving fast gave them a rush, which is close to the same percentage of adults between 26 and 44 who have the same feelings. As stated earlier in the report, a 1999 document provided by the National Highway Traffic Safety Administration (NHTSA) demonstrated that males were more likely than females to enjoy the feeling of speeding in a vehicle (46% vs. 32%) and worry less about the dangers of a collision (41% vs. 32%).

Figure 18b. Feelings Elicited by Extreme Speeding



Margin of Error = +/- 5%

Figure 18b presents open responses regarding the drivers' feelings as a result of driving at an extreme speed. Each answer was coded based on a general category, and the top three responses are displayed. The top response among the drivers was being scared or afraid while driving 20 miles per hour over the speed limit. This response was followed by the feeling of an adrenaline rush along with another negative feeling of being nervous and tense.

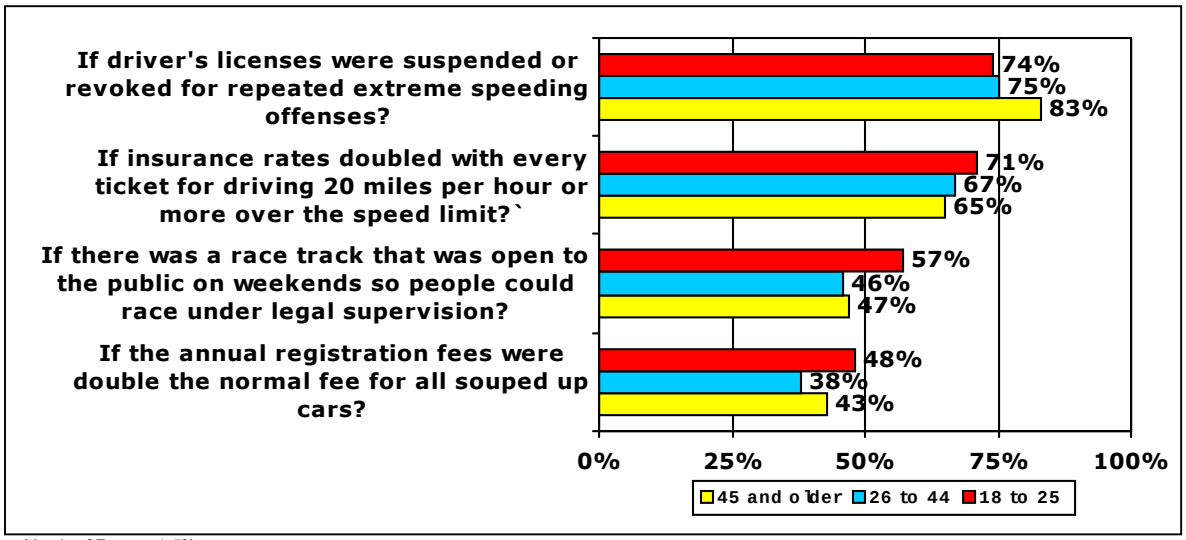
In a previous study by Arnett (1996), it was found that "driving over 20 mph over the speed limit correlated positively with "sensation seeking men." Furthermore, one of the main reasons for

speeding identified in a survey conducted by Christchurch City Council (Hensley 1999) was "the pleasure of driving fast," which was followed by "showing off." In addition, participants in the focus groups were also able to provide the following comments that describe their feelings while extreme speeding:

> "The experience and feeling of the speed…knowing consciously that you are breaking physical limits, things you'd never be able to achieve without any vehicle."
>
> "The adrenaline rush."
>
> "The scared point is when the adrenaline really kicks in. When a kid gets into a car and says, 'I need that adrenaline rush,' that's what he's doing. He's getting to that scared point. When he's scared, he knows it's dangerous."
>
> "Part of the risk and rush is knowing you may die."
>
> "When you hit like 120, you start to think like… 'Whoa!'"

Extreme Speeding Prevention

Figure 19. Proposed Deterrents



Margin of Error = +/- 5%

Percentages represent "Very Likely" and "Somewhat Likely" responses combined

Figure 19 provides four extreme speeding deterrents that were presented to the survey participants. With about three quarters of the respondents from each of the age groups, license revocation for repeated extreme speeding offenses was regarded as the most effective deterrent. Another preventative measure that would be likely to work according to favorable responses was if insurance rates doubled with every ticket for driving 20 miles per hour or more over the speed limit.

Around half of the drivers responded favorably to the idea of a racetrack being open to the public on weekends, which yielded a response rate of 57% among the 18 to 25 year olds who think this would be a likely deterrent. Some of the focus group participants spoke about the racetrack with the following comments:

"The racetrack we have now is not all that big. It's not all that great either. If it's bigger and open everyday of the week and people actually go there, then people would slow down. What's the sense of driving fast on the street if you could save it for the track?"

"Go to the track. That's laser proof to show how fast you can drive."

"The track would be a good way to get my fix."

"When you come out, people go racing on the streets outside the racetrack."

"No matter if you make a racetrack, everybody will still speed."

In the expert interviews, one respondent described a local program supported by the Hawaii Teens for Safer Communities Coalition for Campbell Industrial Park's racetrack, but a program has not been adequately implemented. Moreover, some of the interviewees questioned whether or not young drivers were even aware of the racetrack.

Figure 19 also presented the deterrent of doubling annual registration fees for modified vehicles. Slightly less than half (48%) of the 18 to 15 year olds believed this would be a likely measure in order to prevent the number of extreme speeders. In addition, the experts interviewed suggested stricter laws be implemented for modifying cars and penalties be applied through higher fines or increased insurance rates.

Other preventative measures were brought up during previous phases of the research. One of the participants in the expert interview said that the $277 fine for speeding in school zones is highly effective in slowing down drivers. Therefore, higher fines for extreme speeding would be just as effective. Also, the members of the focus groups had a few ideas of their own with the following suggestions:

"The fines that they give, they need to make it proportionate with it. If you go over 20 miles it doubles or starts to go up exponentially."

"It would have to be something pretty drastic."

"If they confiscate your car, you're screwed."

"Remember when they made people hold up signs on the highway, 'I committed welfare fraud.' Make them do that."

Additional comments were made during the focus groups regarding driver's education in Hawaii. A couple of the participants expressed their concern in improving the education system in the following comments:

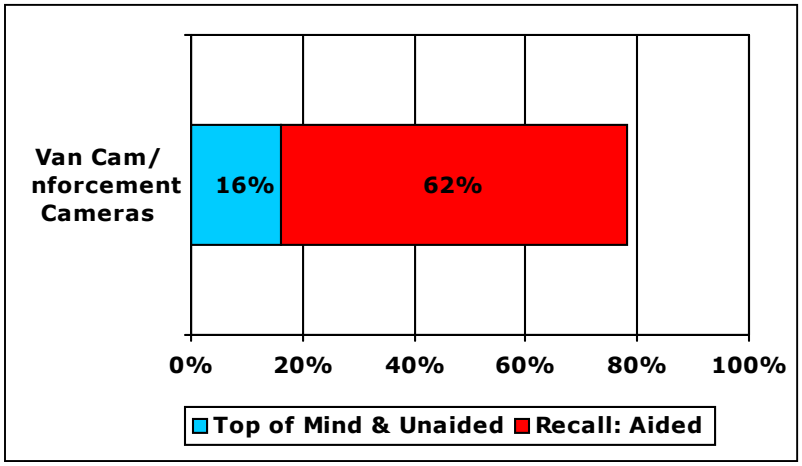
"There's been more speed related accidents this year than all of last year. I think that's because of driver inability and lack of education."

"I think there's a lot more accidents because there's a lot more drivers out there who are not educated enough that are driving."

"I believe [education] would help in the fact that I think traffic would move more efficiently. As far as taking away the speeding habits of people, it's not going to take that away. It will make driving on the highway more efficient and cut down on the frustration."

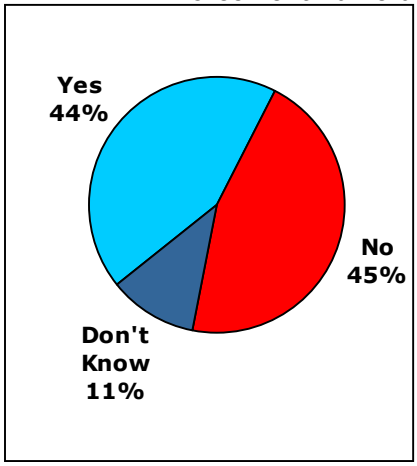
The two figures below were reported from a general population survey covering traffic safety, which was conducted concurrently with the speeding survey.

Figure 20a. Awareness of Enforcement Cameras



Margin of Error = +/- 9.1%

Figure 20b. Effectiveness of Enforcement Cameras



Margin of Error = +/- 10.8%

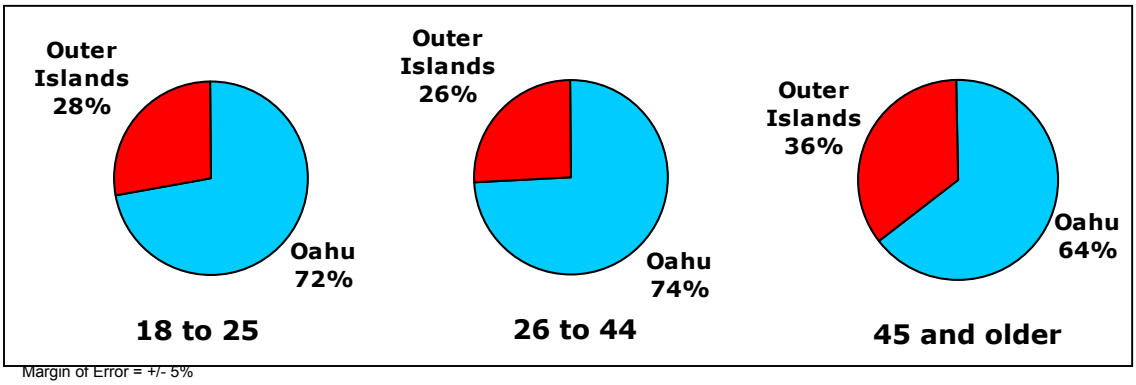
Figure 20a demonstrates the awareness of Van Cam and the use of enforcement cameras with 78% of the general public able to recall the programs. On the other hand, less than half (44%) of Hawaii's drivers felt that the past use of enforcement cameras was effective in deterring speeding. According to another study reviewed, the use of automatic enforcement (laser detection and a photograph) on speeding was most effective when combined with publicity and warning signs (Maekinen and Oei 1994).

In the expert interviews, every respondent that brought up Van Cam supported the concept, but pointed out ways the program was flawed. One traffic safety official said that the program was not communicated correctly to the public. Van Cam was introduced under monetary motives rather than as a way of saving lives by enforcing speed limits. Another expert said that it needed to focus on the problem group instead of the general public. It was explained that the cameras were operated during peak traffic hours in congested areas where multiple drivers barely broke the speed limit threshold. Therefore, the program could have been improved if it was set up during hours in which the roadways were clear in areas where younger drivers raced or drove at extreme speeds. It was argued that Van Cam would have been more effective if it caught a group of five racers rather than cited a thousand motorists in the general public who drove just above the speed of the normal flow of traffic.

Demographics

This following section of the report presents the demographics of the speeding survey participants. The graphs below provide a comparison among the three age categories.

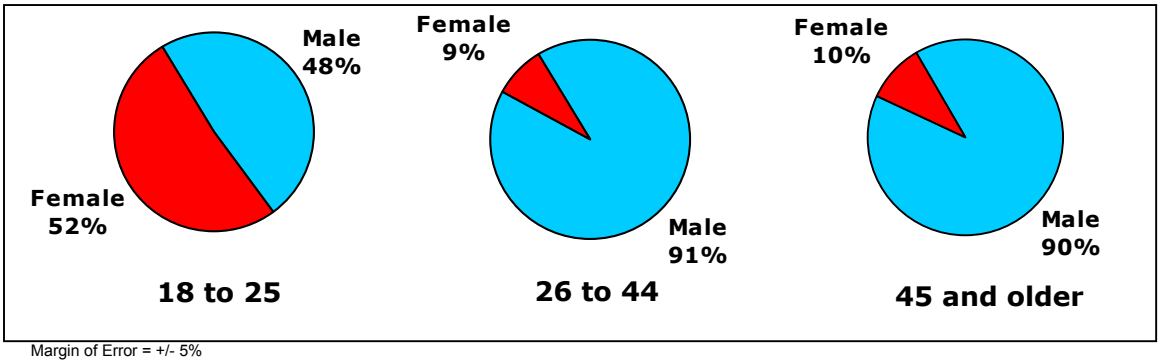
Figure 21. Residence



Margin of Error = +/- 5%

Figure 21 shows that about three quarters of the 18 to 25 (72%) and 26 to 44 (74%) age categories represented Oahu drivers while 64% of those 45 and older were from Oahu. The remaining participants were from each of the outer islands in the State.

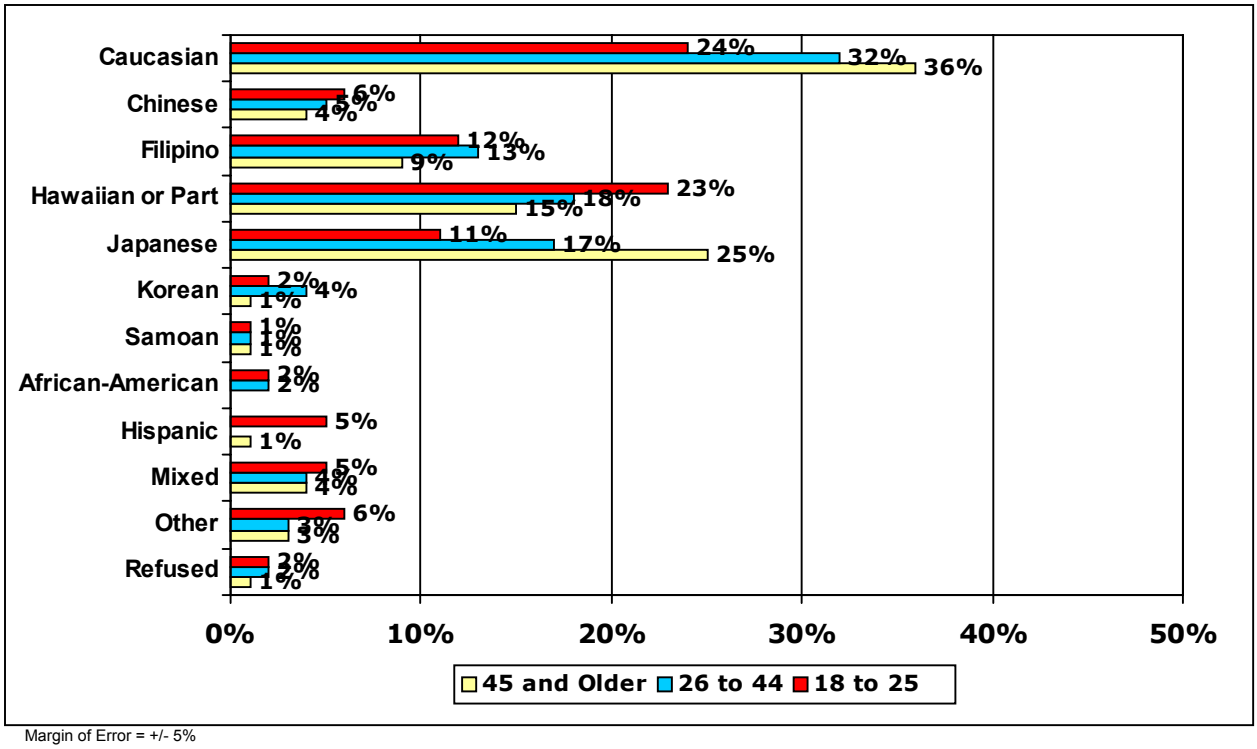
Figure 22. Gender



Margin of Error = +/- 5%

In Figure 22, there was a somewhat equal proportion of males (48%) and females (52%) in the 18 to 25 year old driver segment. Within the 26 to 44 (91%) as well as the 45 and older (90%) age groups, males represented a significantly higher percentage of the genders.

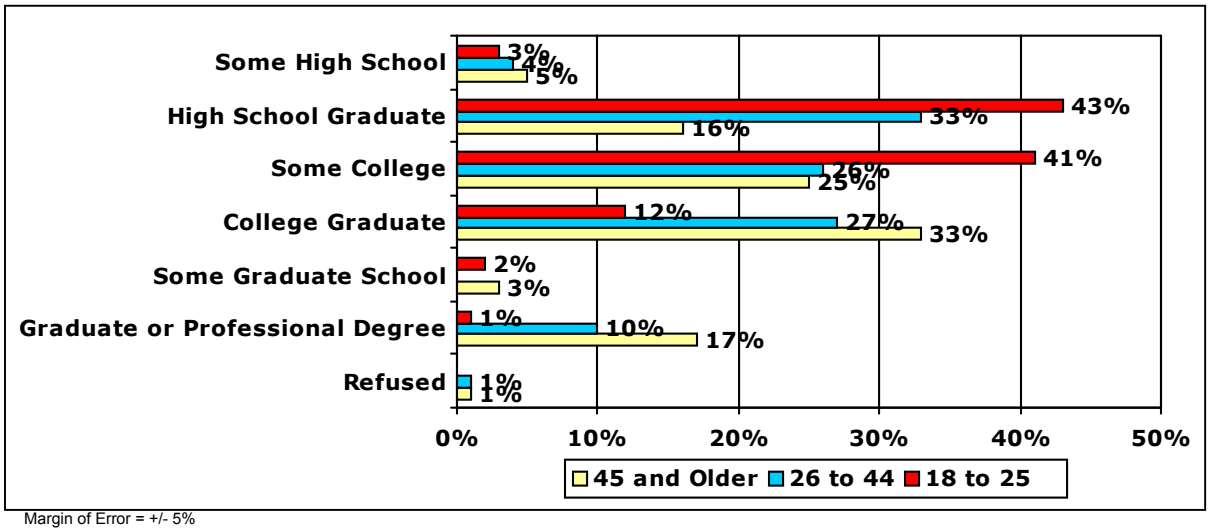
Figure 23. Ethnic Background



Margin of Error = +/- 5%

Within the ethnic backgrounds presented in Figure 23, Caucasians, Hawaiians and part-Hawaiians as well as Japanese represented the majority of the survey responses. Within the Caucasian ethnicity, 24% were between 18 and 25, 32% were within the ages of 26 and 44, and 36% were over the age of 45. There was a similar increase in representation among the age groups for the Japanese ethnicity with 11% who were between 18 and 25, 17% from 26 and 44, and 25% older than 45. Among the 18 to 25 year olds, the second highest ethnicity following Caucasians were Hawaiians or part-Hawaiian (23%).

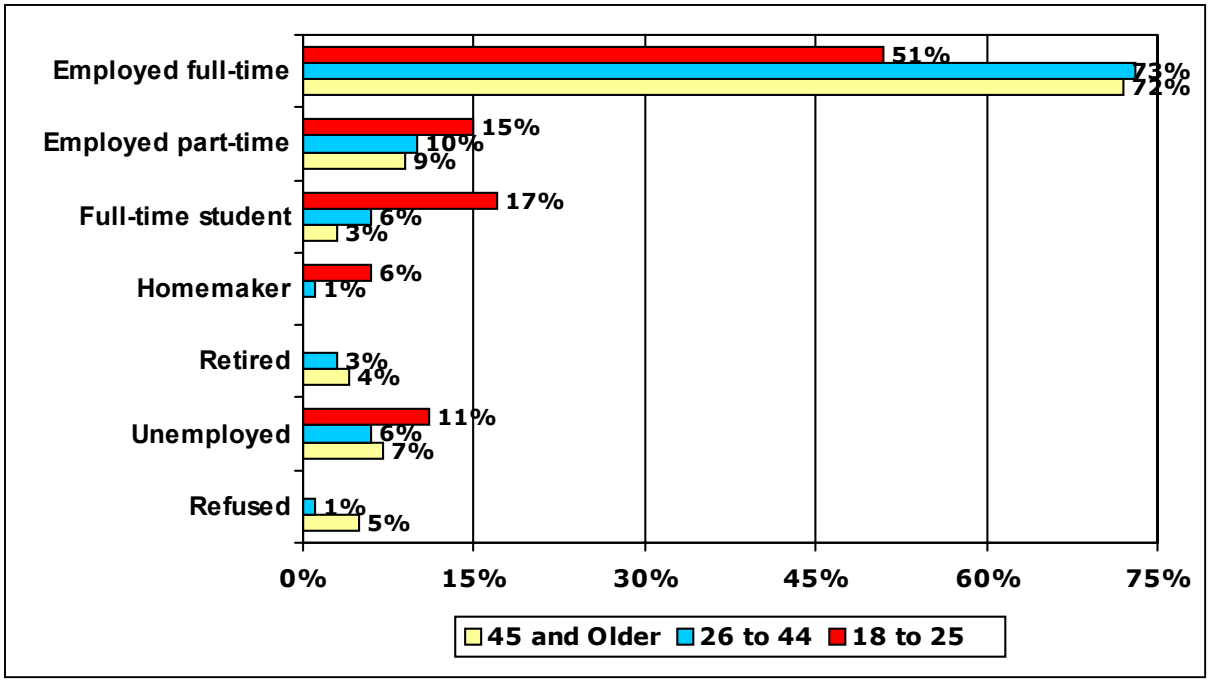
Figure 24. Education



Margin of Error = +/- 5%

In Figure 24, education levels were closely in line among the age groups with the younger generations having lower levels of schooling while older age groups accomplished higher degrees.

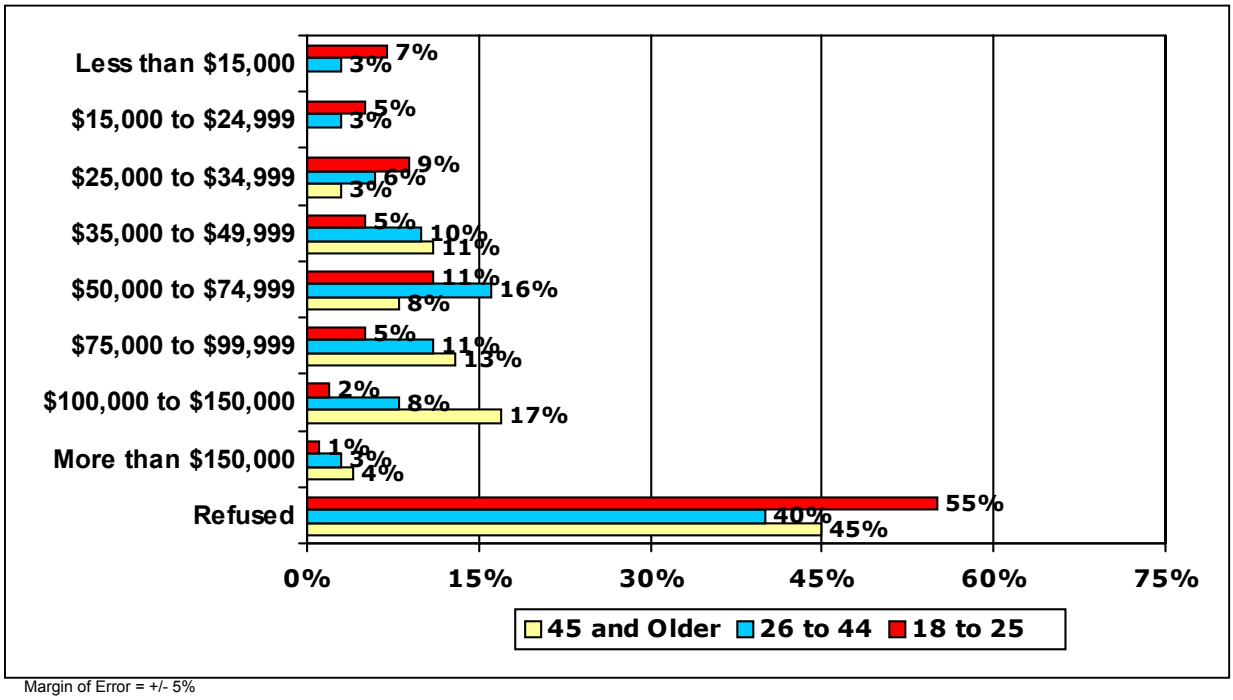
Figure 25. Employment Status



Margin of Error = +/- 5%

Half of the 18 to 25 year olds along with almost three quarters of the 26 to 44 year olds and individuals over 45 were employed full time.

Figure 26. Household Income



Margin of Error = +/- 5%

Nearly half of the respondents refused to provide their household income, which is not uncommon with the sensitivity of the question. Of those that responded, there were increases in income levels as the driver's ages increased.

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APPENDIX A

Department of Transportation Studies, 2003
SPEEDING

Q.371 [IS THIS THE SAME PERSON WHO RESPONDED TO THE HOUSEHOLD SURVEY--DO NOT ASK]

(9273)
□ 1 Yes
□ 2 No

[S - IF THE ANSWER IS 1, THEN SKIP TO QUESTION 381]

Q.372 Hi, my name is _____ and I'm calling on behalf of the Department of Transportation. We're doing an important study about highway safety. Are you 18 years of age or older?

(9274)
□ 1 Yes
□ 2 No
□ 3 DON'T KNOW/REFUSED

[S - IF THE ANSWER IS 1, THEN SKIP TO QUESTION 376]
[S - IF THE ANSWER IS 3, THEN SKIP TO QUESTION 483]

Q.373 May I speak to one of your parents or your guardian to get their permission to ask you a few questions regarding highway safety?

(9275)
□ 1 Yes
□ 2 No
□ 3 PARENT/GUARDIAN NOT AVAILABLE - SCHEDULE CALLBACK
□ 4 NOT INTERESTED/REFUSED

[S - IF THE ANSWER IS 2 OR 4, THEN SKIP TO QUESTION 483]
[S - IF THE ANSWER IS 3, THEN SKIP TO QUESTION 482]

Q.374 [WHEN SPEAKING TO PARENT/GUARDIAN] Hi, my name is _____ and I'm calling on behalf of the Department of Transportation. We're doing an important study about highway safety. Would it be okay if I ask your child a few questions about highway safety?

(9276)
□ 1 Yes
□ 2 No

[S - IF THE ANSWER IS 2, THEN SKIP TO QUESTION 483]

Q.375 Thank you. May I speak to him/her again?

(9277)
□ 1 Yes [TRANSFER BACK TO MINOR RESPONDENT]
□ 2 No [MINOR NO LONGER AVAILABLE-SCHEDULE CALLBACK]

[S - IF THE ANSWER IS 2, THEN SKIP TO QUESTION 482]

Q.376 RECORD GENDER--DO NOT ASK

(9278)
□ 1 Male
□ 2 Female

Q.377 Do you drive?

(9279)
□ 1 Yes
□ 2 No
□ 3 DON'T KNOW/REFUSED

[S - IF THE ANSWER IS NOT 1, THEN SKIP TO QUESTION 390]

Q.378 How many years have you been driving?

[IF UNSURE, READ LIST]

(9280)
□ 1 Less than 1 year
□ 2 1 to 2 years
□ 3 3 to 5 years
□ 4 6 to 10 years
□ 5 11 to 15 years
□ 6 16 to 30 years
□ 7 31 to 50 years
□ 8 51 years or more
□ 9 DON'T KNOW
□ 0 REFUSED

Q.379 What type of vehicle do you drive?

(9281-9286)
□ 1 Car
□ 2 Truck
□ 3 SUV
□ 4 Minivan
□ 5 Motorcycle
□ 6 Other
□ 7 DON'T KNOW/REFUSED

[S - IF THE ANSWER IS NOT 6, THEN SKIP TO QUESTION 381]

Q.380 SPECIFY OTHER TYPE OF VEHICLE

_____ (9287-9336)

Q.381 What make is your vehicle?

(9337-9338)
□ 01 Acura
□ 02 Aston Martin
□ 03 Audi
□ 04 Bentley
□ 05 BMW
□ 06 Buick
□ 07 Cadillac
□ 08 Chevrolet (Chevy)
□ 09 Chrysler
□ 10 Dodge
□ 11 Ferrari
□ 12 Ford
□ 13 GMC
□ 14 Honda
□ 15 Hummer
□ 16 Hyundai
□ 17 Infiniti
□ 18 Jaguar
□ 19 Jeep
□ 20 Kia
□ 21 Lamborghini
□ 22 Lexus
□ 23 Maserati
□ 24 Mazda
□ 25 Mercedes-Benz
□ 26 Mercury
□ 27 MINI
□ 28 Mitsubishi
□ 29 Nissan
□ 30 Oldsmobile
□ 31 Pontiac
□ 32 Porsche
□ 33 Rolls-Royce
□ 34 Saab
□ 35 Suzuki
□ 36 Toyota
□ 37 Volkswagon
□ 38 Volvo
□ 39 Other
□ 40 DON'T KNOW
□ 41 REFUSED

[S - IF THE ANSWER IS NOT 39, THEN SKIP TO QUESTION 383]

Q.382 SPECIFY OTHER MAKE OF VEHICLE

_____ (9339-9388)

Q.383 What year is your vehicle?

(9389-9390)
□ 01 2004
□ 02 2003
□ 03 2002
□ 04 2001
□ 05 2000
□ 06 1999
□ 07 1998
□ 08 1997
□ 09 1996
□ 10 1995
□ 11 1990 TO 1994
□ 12 1980 TO 1989
□ 13 1970 TO 1979
□ 14 1960 or before
□ 15 DON'T KNOW
□ 16 REFUSED

Q.384 Do you have insurance on your vehicle?

(9391-9392)
□ 01 Yes
□ 02 No
□ 03 DON'T KNOW/REFUSED

Q.385 Is your vehicle souped up?

[CLARIFY WITH: MODIFIED FOR PERFORMANCE]

(9393)
□ 1 Yes
□ 2 No
□ 3 DON'T KNOW/REFUSED

[S - IF THE ANSWER IS NOT 1, THEN SKIP TO QUESTION 387]

Q.386 How is it modified?

_____ (9394-9643)

_____

_____

_____

Q.387 Do you belong to a car club?

(9644)
□ 1 Yes
□ 2 No
□ 3 DON'T KNOW/REFUSED

[S - IF THE ANSWER IS NOT 1, THEN SKIP TO QUESTION 389]

Q.388 What car club do you belong to?

_____ (9645-9794)

_____

Q.389 Is your vehicle equipped with an airbag?

(9795)
□ 1 Yes
□ 2 No
□ 3 DON'T KNOW/REFUSED

Q.390 In your own words, what are the most common causes of fatalities of car drivers between the ages of 16 and 25?

_____ (9796-10045)

_____

_____

_____

Q.391 I am going to read you a list of four traffic violations. Could you please put them in order from most serious to least serious?

[ENTER 1 BY MOST SERIOUS, 2 BY SECOND CHOICE, ETC.]

Running a red light	__ (10046)
Not wearing a seat belt	__ (10047)
Drunk driving	__ (10048)
Speeding 20 miles per hour over the speed limit ..	__ (10049)

Q.392 I am going to read you a series of statements regarding speeding and racing. After each one, please tell me if you strongly agree, somewhat agree, neither agree nor disagree, somewhat disagree or strongly disagree.

(10050)
□ 1 ENTER 1 TO CONTINUE

[ASK QUESTIONS 393 TO 410 IN RANDOM ORDER]
[A - IF THE ANSWER TO QUESTION 371 IS 1, THEN SKIP TO QUESTION 9999]

Q.393 Extreme speeding is the major cause for highway fatalities

[REPEAT SCALE IF NECESSARY]

(10051)
□ 1 Strongly Agree
□ 2 Somewhat Agree
□ 3 Neither Agree nor Disagree
□ 4 Somewhat Disagree
□ 5 Strongly Disagree
□ 6 Don't Know

Q.394 Driving fast gives me a rush

[REPEAT SCALE IF NECESSARY]

(10052)
□ 1 Strongly Agree
□ 2 Somewhat Agree
□ 3 Neither Agree nor Disagree
□ 4 Somewhat Disagree
□ 5 Strongly Disagree
□ 6 DON'T KNOW

Q.395 Driving 20 miles per hour or more over the speed limit puts me at risk of a serious accident

[REPEAT SCALE IF NECESSARY]

(10053)
□ 1 Strongly Agree
□ 2 Somewhat Agree
□ 3 Neither Agree nor Disagree
□ 4 Somewhat Disagree
□ 5 Strongly Disagree
□ 6 DON'T KNOW

Q.396 Most of my friends drive fast

[REPEAT SCALE IF NECESSARY]

(10054)
□ 1 Strongly Agree
□ 2 Somewhat Agree
□ 3 Neither Agree nor Disagree
□ 4 Somewhat Disagree
□ 5 Strongly Disagree
□ 6 DON'T KNOW

[A - IF THE ANSWER TO QUESTION 371 IS 1, THEN SKIP TO QUESTION 9999]

Q.397 Teenagers drive too fast

[REPEAT SCALE IF NECESSARY]

(10055)
□ 1 Strongly Agree
□ 2 Somewhat Agree
□ 3 Neither Agree nor Disagree
□ 4 Somewhat Disagree
□ 5 Strongly Disagree
□ 6 DON'T KNOW

Q.398 My car is souped up to make it safer when I speed

[REPEAT SCALE IF NECESSARY]

(10056)
□ 1 Strongly Agree
□ 2 Somewhat Agree
□ 3 Neither Agree nor Disagree
□ 4 Somewhat Disagree
□ 5 Strongly Disagree
□ 6 DON'T KNOW

Q.399 I tend to speed more at night

[REPEAT SCALE IF NECESSARY]

(10057)
□ 1 Strongly Agree
□ 2 Somewhat Agree
□ 3 Neither Agree nor Disagree
□ 4 Somewhat Disagree
□ 5 Strongly Disagree
□ 6 DON'T KNOW

Q.400 I drive faster when I'm alone

[REPEAT SCALE IF NECESSARY]

(10058)
□ 1 Strongly Agree
□ 2 Somewhat Agree
□ 3 Neither Agree nor Disagree
□ 4 Somewhat Disagree
□ 5 Strongly Disagree
□ 6 DON'T KNOW

Q.401 I like to see how fast my car can go against other cars

[REPEAT SCALE IF NECESSARY]

(10059)
□ 1 Strongly Agree
□ 2 Somewhat Agree
□ 3 Neither Agree nor Disagree
□ 4 Somewhat Disagree
□ 5 Strongly Disagree
□ 6 DON'T KNOW

Q.402 I would obey the speed limits if all the other drivers did

[REPEAT SCALE IF NECESSARY]

(10060)
□ 1 Strongly Agree
□ 2 Somewhat Agree
□ 3 Neither Agree nor Disagree
□ 4 Somewhat Disagree
□ 5 Strongly Disagree
□ 6 DON'T KNOW

[A - IF THE ANSWER TO QUESTION 371 IS 1, THEN SKIP TO QUESTION 9999]

Q.403 Traffic in Hawaii creates aggressive behavior that causes drivers to speed

[REPEAT SCALE IF NECESSARY]

(10061)
□ 1 Strongly Agree
□ 2 Somewhat Agree
□ 3 Neither Agree nor Disagree
□ 4 Somewhat Disagree
□ 5 Strongly Disagree
□ 6 DON'T KNOW

[A - IF THE ANSWER TO QUESTION 371 IS 1, THEN SKIP TO QUESTION 9999]

Q.404 Most people drive above the speed limit in Hawaii

[REPEAT SCALE IF NECESSARY]

(10062)
□ 1 Strongly Agree
□ 2 Somewhat Agree
□ 3 Neither Agree nor Disagree
□ 4 Somewhat Disagree
□ 5 Strongly Disagree
□ 6 DON'T KNOW

Q.405 I tend to speed more during daylight hours

[REPEAT SCALE IF NECESSARY]

(10063)
□ 1 Strongly Agree
□ 2 Somewhat Agree
□ 3 Neither Agree nor Disagree
□ 4 Somewhat Disagree
□ 5 Strongly Disagree
□ 6 DON'T KNOW

Q.406 A speeding ticket wont change my insurance costs

[REPEAT SCALE IF NECESSARY]

(10064)
□ 1 Strongly Agree
□ 2 Somewhat Agree
□ 3 Neither Agree nor Disagree
□ 4 Somewhat Disagree
□ 5 Strongly Disagree
□ 6 DON'T KNOW

Q.407 I set my speed with other cars around me regardless of the speed limit

[REPEAT SCALE IF NECESSARY]

(10065)
□ 1 Strongly Agree
□ 2 Somewhat Agree
□ 3 Neither Agree nor Disagree
□ 4 Somewhat Disagree
□ 5 Strongly Disagree
□ 6 DON'T KNOW

Q.408 Teenage drivers cause the most accidents in Hawaii

[REPEAT SCALE IF NECESSARY]

(10066)
□ 1 Strongly Agree
□ 2 Somewhat Agree
□ 3 Neither Agree nor Disagree
□ 4 Somewhat Disagree
□ 5 Strongly Disagree
□ 6 DON'T KNOW

Q.409 I stay alert for police cars when I speed

[REPEAT SCALE IF NECESSARY]

(10067)
□ 1 Strongly Agree
□ 2 Somewhat Agree
□ 3 Neither Agree nor Disagree
□ 4 Somewhat Disagree
□ 5 Strongly Disagree
□ 6 DON'T KNOW

Q.410 I know where most police officers set speed traps

[REPEAT SCALE IF NECESSARY]

(10068)
□ 1 Strongly Agree
□ 2 Somewhat Agree
□ 3 Neither Agree nor Disagree
□ 4 Somewhat Disagree
□ 5 Strongly Disagree
□ 6 DON'T KNOW

Q.411 Now I have a question about your understanding of people's safety habits.

What percentage of people in Hawaii do you think wear a seatbelt?

(10069)
□ 1 None
□ 2 1% to 25%
□ 3 26% to 50%
□ 4 51% to 75%
□ 5 76% to 99%
□ 6 All of them
□ 7 DON'T KNOW
□ 8 REFUSED

[A - IF THE ANSWER TO QUESTION 371 IS 1, THEN SKIP TO QUESTION 9999]

Q.412 How often do you wear a seat belt? [READ LIST]

(10070)
□ 1 Always
□ 2 Sometimes
□ 3 Never
□ 4 DON'T KNOW
□ 5 REFUSED

Q.413 Approximately what percentage of drivers in Hawaii do you think exceed the speed limit?

[ENTER 999 FOR DON'T KNOW/REFUSED]

_____ (10071-10073)

[A - IF THE ANSWER TO QUESTION 371 IS 1, THEN SKIP TO QUESTION 418]

Q.414 What percentage of the time would you say that you drive at or below the posted speed limit?

[DO NOT READ LIST]

(10074)
□ 1 Never
□ 2 1% to 25%
□ 3 26% to 50%
□ 4 51% to 75%
□ 5 76% to 99%
□ 6 Always
□ 7 DON'T KNOW
□ 8 REFUSED

[S - IF THE ANSWER IS 6-8, THEN SKIP TO QUESTION 418]

Q.415 What percentage of the time would you say you drive at 10 miles per hour above the speed limit?

[DO NOT READ LIST]

(10075)
□ 1 Never
□ 2 1% to 25%
□ 3 26% to 50%
□ 4 51% to 75%
□ 5 76% to 99%
□ 6 Always
□ 7 DON'T KNOW
□ 8 REFUSED

[S - IF THE ANSWER IS 6-8, THEN SKIP TO QUESTION 418]

Q.416 And what percentage of the time do you drive 20 miles per hour or more?

[DO NOT READ LIST]

(10076)
□ 1 Never
□ 2 1% to 25%
□ 3 26% to 50%
□ 4 51% to 75%
□ 5 76% to 99%
□ 6 Always
□ 7 DON'T KNOW
□ 8 REFUSED

[S - IF THE ANSWER IS 6-8, THEN SKIP TO QUESTION 418]

Q.417 How about 30 miles per hour or more?

[DO NOT READ LIST]

(10077)
□ 1 Never
□ 2 1% to 25%
□ 3 26% to 50%
□ 4 51% to 75%
□ 5 76% to 99%
□ 6 Always
□ 7 DON'T KNOW
□ 8 REFUSED

Q.418 How many miles per hour over the speed limit would you consider your driving speed to be extreme?

[ENTER 999 FOR DON'T KNOW/REFUSED]

_____ (10078-10080)

[A - IF THE ANSWER TO QUESTION 371 IS 1, THEN SKIP TO QUESTION 421]

Q.419 How many miles over the speed limit do you think it is acceptable to drive?

[IF RESPONDENT GIVES A RANGE, ENTER THE HIGHEST NUMBER]

_____ (10081-10083)

Q.420 How many miles over the speed limit do you think it is **unacceptable** to drive, and you would **never** drive at such speed?

[IF RESPONDENT GIVES A RANGE, ENTER THE HIGHEST NUMBER]

_____ (10084-10086)

Q.421 Could you please describe for me the feelings or sensations you get when you drive at an extreme speed?

_____ (10087-10336)

_____

_____

_____

Q.422 Do you know of any roadways or areas of the island where people tend to speed?

(10337)
□ 1 Yes
□ 2 No
□ 3 DON'T KNOW/REFUSED

[S - IF THE ANSWER IS NOT 1, THEN SKIP TO QUESTION 424]

Q.423 And which roadways or areas are those?

_____ (10338-10587)

_____

_____

_____

Q.424 Have you ever seen any of your friends race on the streets?

(10588)
□ 1 Yes
□ 2 No
□ 3 DON'T KNOW
□ 4 REFUSED

Q.425 Have you ever raced on the streets?

(10589)
□ 1 Yes
□ 2 No
□ 3 DON'T KNOW
□ 4 REFUSED

Q.426 Do you know of any roadways or areas of the island where people race?

(10590)
□ 1 Yes
□ 2 No
□ 3 DON'T KNOW
□ 4 REFUSED

[S - IF THE ANSWER IS NOT 1, THEN SKIP TO QUESTION 428]

Q.427 And which roadways or areas are those?

_____ (10591-10840)

_____

_____

_____

[A - IF THE ANSWER TO QUESTION 371 IS 1, THEN SKIP TO QUESTION 461]

Q.428 Now I have a few questions about your understanding and experience with traffic safety. To the best of your knowledge, how many people in Hawaii die in traffic accidents caused by speeding or racing each year?

[ENTER 999999 FOR DON'T KNOW/REFUSED]

_____ (10841-10846)

Q.429 Do you know anyone that has been involved in an accident in which someone was injured?

(10847)
□ 1 Yes
□ 2 No
□ 3 DON'T KNOW
□ 4 REFUSED

Q.430 Have you ever been involved in an accident in which you were injured?

(10848)
□ 1 Yes
□ 2 No
□ 3 DON'T KNOW
□ 4 REFUSED

[A - IF THE ANSWER TO QUESTION 429 IS NOT 1, THEN SKIP TO QUESTION 436]

Q.431 I'm going to ask you a series of questions regarding the most recent accident involving someone you know.

What type of accident was it? Was it a...? [READ LIST]

(10849)
□ 1 Car
□ 2 Pedestrian
□ 3 Motorcycle
□ 4 Moped
□ 5 Bicycle
□ 6 Other
□ 7 DON'T KNOW
□ 8 REFUSED

[S - IF THE ANSWER IS NOT 6, THEN SKIP TO QUESTION 433]

Q.432 SPECIFY OTHER TYPE OF ACCIDENT

_____ (13649-13798)

_____

_____

Q.433 Please excuse me for asking, but were there any fatalities involved in the accident?

(13799)
□ 1 Yes
□ 2 No
□ 3 DON'T KNOW
□ 4 REFUSED

Q.434 Was speeding one of the causes of the accident?

(10850)
□ 1 Yes
□ 2 No
□ 3 DON'T KNOW
□ 4 REFUSED

[A - IF THE ANSWER TO QUESTION 431 IS NOT 1, THEN SKIP TO QUESTION 436]

Q.435 Was everyone wearing seat belts?

(10851)
□ 1 Yes
□ 2 No
□ 3 DON'T KNOW
□ 4 REFUSED

[A - IF THE ANSWER TO QUESTION 430 IS NOT 1, THEN SKIP TO QUESTION 441]

Q.436 Now I'm going to ask you a series of questions regarding **your** most recent accident.

What type of accident was it? Was it a...? [READ LIST]

(10852)
□ 1 Car
□ 2 Pedestrian
□ 3 Motorcycle
□ 4 Moped
□ 5 Bicycle
□ 6 Other
□ 7 DON'T KNOW
□ 8 REFUSED

[S - IF THE ANSWER IS NOT 6, THEN SKIP TO QUESTION 438]

Q.437 SPECIFY OTHER TYPE OF ACCIDENT

_____ (13800-13949)

_____

_____

Q.438 Pardon me for asking, but were there any fatalities involved in the accident?

(13950)
□ 1 Yes
□ 2 No
□ 3 DON'T KNOW
□ 4 REFUSED

Q.439 Was speeding one of the causes of the accident?

(10853)
□ 1 Yes
□ 2 No
□ 3 DON'T KNOW
□ 4 REFUSED

[A - IF THE ANSWER TO QUESTION 436 IS NOT 1, THEN SKIP TO QUESTION 441]

Q.440 Were you wearing a seat belt?

(10854)
□ 1 Yes
□ 2 No
□ 3 DON'T KNOW
□ 4 REFUSED

[A - IF THE ANSWER TO QUESTION 429 IS NOT 1, AND...]
[A - IF THE ANSWER TO QUESTION 430 IS NOT 1, THEN SKIP TO QUESTION 443]

Q.441 Has the accident caused you or your family to change their behavior in any way?

(10855)
□ 1 Yes
□ 2 No
□ 3 DON'T KNOW
□ 4 REFUSED

[S - IF THE ANSWER IS NOT 1, THEN SKIP TO QUESTION 442]

Q.442 In what way?

_____ (10856-11105)

_____

_____

_____

Q.443 I just have a couple of questions about highway safety programs in Hawaii. Can you recall any highway safety campaigns that have been implemented in Hawaii in the past?

(11106)
□ 1 Yes
□ 2 No
□ 3 DON'T KNOW
□ 4 REFUSED

[S - IF THE ANSWER IS NOT 1, THEN SKIP TO QUESTION 446]

Q.444 Which campaigns can you recall? Any others?

[DO NOT READ LIST]

(11107-11112)
□ 1 Van Cam
□ 2 Drive Akamai
□ 3 Drive Safely, Arrive Alive
□ 4 Click-it or Ticket
□ 5 Don't Drink and Drive
□ 6 Other
□ 7 DON'T KNOW/REFUSED

Q.445 OTHER CAMPAIGN(S) RECALLED

_____ (11113-11262)

_____

_____

[A - IF THE ANSWER TO QUESTION 444 IS 4, THEN SKIP TO QUESTION 447]

Q.446 Are you familiar with the Click-it or Ticket program in Hawaii?

(11263)
□ 1 Yes
□ 2 No
□ 3 DON'T KNOW
□ 4 REFUSED

[S - IF THE ANSWER IS NOT 1, THEN SKIP TO QUESTION 449]

[A - IF THE ANSWER TO QUESTION 444 IS NOT 4, AND...]
[A - IF THE ANSWER TO QUESTION 446 IS NOT 1, THEN SKIP TO QUESTION 449]

Q.447 Do you think the Click-it or Ticket program was effective?

(11264)
□ 1 Yes
□ 2 No
□ 3 DON'T KNOW
□ 4 REFUSED

[S - IF THE ANSWER IS NOT 1, THEN SKIP TO QUESTION 449]

Q.448 In what way?

_____ (11265-11514)

_____

_____

_____

[A - IF THE ANSWER TO QUESTION 444 IS 1, THEN SKIP TO QUESTION 450]

Q.449 Are you familiar with the use of enforcement cameras during the past in Hawaii?

(11515)
□ 1 Yes
□ 2 No
□ 3 DON'T KNOW
□ 4 REFUSED

[S - IF THE ANSWER IS NOT 1, THEN SKIP TO QUESTION 452]

[A - IF THE ANSWER TO QUESTION 444 IS NOT 1, AND...]
[A - IF THE ANSWER TO QUESTION 449 IS NOT 1, THEN SKIP TO QUESTION 452]

Q.450 Do you think the use of enforcement cameras was effective?

(11516)
□ 1 Yes
□ 2 No
□ 3 DON'T KNOW
□ 4 REFUSED

[S - IF THE ANSWER IS NOT 1, THEN SKIP TO QUESTION 452]

Q.451 In what way?

_____ (11517-11766)

_____

_____

_____

Q.452 Does the possibility of receiving a traffic ticket influence your driving habits?

(11767)
□ 1 Yes
□ 2 No
□ 3 DON'T KNOW
□ 4 REFUSED

[S - IF THE ANSWER IS NOT 1, THEN SKIP TO QUESTION 454]

Q.453 In what way?

_____ (11768-12017)

_____

_____

_____

Q.454 Now, I would like you ask you about traffic tickets. Have you received any traffic tickets in the past five years?

(12018)
□ 1 Yes
□ 2 No
□ 3 DON'T KNOW
□ 4 REFUSED

[S - IF THE ANSWER IS NOT 1, THEN SKIP TO QUESTION 461]

Q.455 I'm going to read you a list of types of traffic tickets and I'd like for you to tell me how many of the following types you have received in the past five years.

How many **speeding** tickets?

(12019)
□ 1 None
□ 2 1 or 2
□ 3 3 or 4
□ 4 5 or more
□ 5 DON'T KNOW
□ 6 REFUSED

Q.456 How many tickets for **running a red light**?

(12020)
□ 1 None
□ 2 1 or 2
□ 3 3 or 4
□ 4 5 or more
□ 5 DON'T KNOW
□ 6 REFUSED

Q.457 How many **parking** tickets?

(12021)
□ 1 None
□ 2 1 or 2
□ 3 3 or 4
□ 4 5 or more
□ 5 DON'T KNOW
□ 6 REFUSED

Q.458 How many tickets for **not wearing a seat belt**?

(12022)
□ 1 None
□ 2 1 or 2
□ 3 3 or 4
□ 4 5 or more
□ 5 DON'T KNOW
□ 6 REFUSED

Q.459 Any other types?

(12023)
□ 1 Yes
□ 2 No
□ 3 DON'T KNOW
□ 4 REFUSED

[S - IF THE ANSWER IS NOT 1, THEN SKIP TO QUESTION 461]

Q.460 And how many of those have you received within the past 5 years?

[ENTER TYPE OF TICKET AND NUMBER]

_____ (12024-12273)

_____

_____

_____

[A - IF THE ANSWER TO QUESTION 415 IS NOT 2-6, AND...]
[A - IF THE ANSWER TO QUESTION 416 IS NOT 2-6, AND...]
[A - IF THE ANSWER TO QUESTION 417 IS NOT 2-6, THEN SKIP TO QUESTION 463]

Q.461 Can you think of anything that could be done to convince you not to speed?

(12274)
□ 1 Yes
□ 2 No
□ 3 DON'T KNOW
□ 4 REFUSED

[S - IF THE ANSWER IS NOT 1, THEN SKIP TO QUESTION 463]

Q.462 And what would that be?

_____ (12275-12524)

_____

_____

_____

Q.463 A number of suggestions have been made about actions that might help to ensure that drivers stay within the speed limit. For each one, please tell me if you think the action is very likely, somewhat likely, neither likely nor unlikely, somewhat unlikely, or very unlikely to reduce speeding.

(12525)
□ 1 ENTER 1 TO CONTINUE

Q.464 If insurance rates doubled with every ticket for driving 20 miles per hour or more over the speed limit, how likely do you think that would be to reduce speeding?

[REPEAT SCALE IF NECESSARY]

(12526)
□ 1 Very likely
□ 2 Somewhat likely
□ 3 Neither likely nor unlikely
□ 4 Somewhat unlikely
□ 5 Very unlikely
□ 6 DON'T KNOW
□ 7 REFUSED

Q.465 If there was a race track that was open to the public on the weekends, so people could race under legal supervision?

[REPEAT SCALE IF NECESSARY]

(12527)
□ 1 Very likely
□ 2 Somewhat likely
□ 3 Neither likely nor unlikely
□ 4 Somewhat unlikely
□ 5 Very unlikely
□ 6 DON'T KNOW
□ 7 REFUSED

Q.466 If the annual registration fees were double the normal fee for all souped up cars?

[REPEAT SCALE IF NECESSARY]

(12528)
□ 1 Very likely
□ 2 Somewhat likely
□ 3 Neither likely nor unlikely
□ 4 Somewhat unlikely
□ 5 Very unlikely
□ 6 DON'T KNOW
□ 7 REFUSED

Q.467 If drivers' licenses were suspended or revoked for repeated extreme speeding offenses?

[REPEAT SCALE IF NECESSARY]

(12529)
□ 1 Very likely
□ 2 Somewhat likely
□ 3 Neither likely nor unlikely
□ 4 Somewhat unlikely
□ 5 Very unlikely
□ 6 DON'T KNOW
□ 7 REFUSED

[A - IF THE ANSWER TO QUESTION 371 IS 1, THEN SKIP TO QUESTION 470]

Q.468 A variety of groups are considering putting forth legislation in the coming session. Are you in favor of a universal seat belt law that requires everyone in every vehicle to wear a seatbelt?

(12530)
□ 1 Yes
□ 2 No
□ 3 DON'T KNOW
□ 4 REFUSED

Q.469 Which age category do you fall into? Are you.... [READ LIST]

(12531)
□ 1 16 to 25
□ 2 26 to 34
□ 3 35 to 44
□ 4 45 to 54
□ 5 55 to 64
□ 6 65 or older
□ 7 DON'T KNOW/REFUSED

Q.470 Are you or anyone in your household on active duty in the U.S. military?

(12532)
□ 1 Yes
□ 2 No
□ 3 DON'T KNOW
□ 4 REFUSED

Q.471 How long have you lived in Hawaii? [READ LIST]

(12533)
□ 1 Less than 1 year
□ 2 1 to 5 years
□ 3 6 to 10 years
□ 4 11 to 20 years
□ 5 More than 20 years, but not lifetime
□ 6 Lifetime resident of Hawaii
□ 7 DON'T KNOW
□ 8 REFUSED

Q.472 What is your marital status? Are you…. [READ LIST]

(12534)
□ 1 Single, never married
□ 2 Married
□ 3 Separated, widowed or divorced
□ 4 DON'T KNOW/REFUSED

Q.473 What is your ethnic background?

[DO NOT READ LIST]

(12535-12536)
□ 01 Caucasian
□ 02 Chinese
□ 03 Filipino
□ 04 Hawaiian or part-Hawaiian
□ 05 Japanese
□ 06 Korean
□ 07 Samoan
□ 08 African-American
□ 09 Hispanic or Latino
□ 10 Mixed, not Hawaiian
□ 11 Other
□ 12 DON'T KNOW
□ 13 REFUSED

[S - IF THE ANSWER IS NOT 11, THEN SKIP TO QUESTION 475]

Q.474 SPECIFY OTHER ETHNICITY

_____ (12537-12636)

_____

Q.475 What is your highest level of education completed?

[READ LIST IF NECESSARY]

(12637)
□ 1 Grade 8 or less
□ 2 Some high school
□ 3 High school graduate
□ 4 Some college (1 to 3 years)
□ 5 College graduate (Bachelor's degree)
□ 6 Some graduate school
□ 7 Graduate or professional degree
□ 8 DON'T KNOW/REFUSED

Q.476 What is your employment status? Are you…[READ LIST]

(12638)
□ 1 Employed full-time (35+ hours/week)
□ 2 Employed part-time
□ 3 A full-time student
□ 4 A homemaker
□ 5 Retired
□ 6 Currently Unemployed
□ 7 DON'T KNOW/REFUSED

Q.477 What was your total 2002 **PERSONAL** income, before taxes?
Was it…[READ LIST]

(12639)
□ 1 Less than $15,000
□ 2 $15,000 to $24,999
□ 3 $25,000 to $34,999
□ 4 $35,000 to $49,999
□ 5 $50,000 to $74,999
□ 6 $75,000 to $99,999
□ 7 $100,000 to $150,000
□ 8 More than $150,000
□ 9 DON'T KNOW
□ 0 REFUSED

Q.478 What was the total 2002 income for **ALL** the people in your **household**, before taxes? Was it….[READ LIST]

(12640)
□ 1 Less than $15,000
□ 2 $15,000 to $24,999
□ 3 $25,000 to $34,999
□ 4 $35,000 to $49,999
□ 5 $50,000 to $74,999
□ 6 $75,000 to $99,999
□ 7 $100,000 to $150,000
□ 8 More than $150,000
□ 9 DON'T KNOW
□ 0 REFUSED

Q.479 Thank you so much for your time. We may do other surveys like this one in the future...may we contact you again to participate in an e-mail panel and/or focus group?

(12641)
□ 1 Yes
□ 2 No
□ 3 DON'T KNOW
□ 4 REFUSED

[S - IF THE ANSWER IS NOT 1, THEN SKIP TO QUESTION 481]

Q.480 May I please have your name and e-mail address?

_____ (12642-12891)

_____

_____

_____

Q.481 Thank you for your time. Goodbye.

(12892)
□ 1 ENTER 1 TO COMPLETE

[S - IF THE ANSWER IS 1, THEN SKIP TO QUESTION 484]

Q.482 What would be a convenient time for me to reach that person?

[SCHEDULE CALLBACK APPOINTMENT]

_____ (12893-13042)

_____

_____

Q.483 Okay, thank you for your time.

(13043)
□ 1 ENTER 1 TO TERMINATE

[S - IF THE ANSWER IS 1, THEN SKIP TO QUESTION 9999]